

# AMERICAN VETERINARY REVIEW.

SEPTEMBER, 1904.

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## EDITORIAL.

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### EUROPEAN CHRONICLES.

PARIS, FRANCE, July 15, 1904.

“DOPING” OR “DOPPING.”—“You are just the man I am looking for,” said Prof. Kauffman, of Alfort, to me a while ago; “I have been appointed, with Almy and Garcin, by the Secretary of Agriculture to make scientific experiments on the subject of ‘doping,’ and you, almost an American, can tell me where I can find information on the subject in America.”

Of course I could not acknowledge my almost entire ignorance of the subject. I knew, or perhaps thought that I did, that the word was of American (?) invention, and that it was generally admitted, even in France, to refer to some more or less reprehensible practice on race-tracks. I also knew that various substances had been resorted to, such as kola, theobromin, digitaline, ether, caffen, arsenic, strychnia, etc.; and that was about the length of my knowledge. It was not much. But the fact of the appointment by the Secretary of Agriculture of three veterinarians (one physiologist and two practitioners of high standing) was not to be ignored; and, besides this, an order which is issued by the Secretary of War, by which “doping” or “dopping,” as it is written, is strictly forbidden in military raids or courses as being pernicious to horses, and falsifying the results obtained in the trials to which those animals are submitted; and, finally, seeing that not only in France the subject is creating such a sensation, but also in Italy, where Prof. Fogliata writes upon it in the *Giornale d’Ippologia*, I

have thought to call upon my friends of America to ask them some bits of information. Those to whom I have applied have answered me rather in a meagre manner. I then have recourse to my heavy troops, the generality of our practitioners, and ask them to agitate the subject in the pages of the REVIEW, or to let me know where I can have all that has been written in America on "doping" or "dopping" (which is correct?).

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But why should this artificial way of raising the vital power of an animal be so objectionable. A decision of the Jockey Club here has, I think, condemned it, and, if my memory serves me right, punished by exclusion from the track, owners of horses or trainers who resorted to it. Is it injurious? The Secretary of War here says it falsifies the results obtained in races, but still the good that can be derived from it cannot be ignored, and if "doping" is done, based on rules having physiological experiments and therapeutical observations to support them, then why all those objections?

The truth is that scientific facts are on record. In the *Revue* of Prof. Leclainche of February a military veterinarian (Mr. Dellis) records a few cases which are very interesting. An English thoroughbred has been very ill with pasteurellosis, pleuro-pneumonia; and convalescence is slow. Placed on subcutaneous injections of cacodylate, in a few days he is fit for a race, in which he runs second. A mare much debilitated by distemper wins a heavy race after a similar treatment. A third, a fourth, a fifth case of similar nature all furnish the same results.

One of those was literally "doped" for racing purposes. Submitted to cacodylate and arseniate of strychnia for five days before a race, this animal won three races successively against horses it could never have beaten before.

For Mr. Dellis the cacodylate used by Americans may be a "doping," but as a means of treatment it is excellent.

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**THE USE OF COCAINE AS A DIAGNOSTIC FOR LAMENESS.**—If the REVIEW is correct, the first record of the value of cocaine

in the diagnosis of lameness is due to Dr. Torrance, who in July, 1890, gave our readers his experiments with the drug, which by his writings had already been used in the West by veterinarians for several years. Of course, the method spread: it became a thing of almost daily practice with every veterinarian. The operation, however, was rather limited in its application, the injection being made only on the tract of the nerves of the lower part of the extremity.

Whether this *modus operandi* is of American origin or not, I am not prepared to say, although one of the writers in the REVIEW claims it is. Nevertheless, it is practiced in France, where it was introduced by Mr. Dassonville in 1897, and recently in an excellent article on the diagnosis of lameness, published in the *Revue Générale de Médecine Vétérinaire*, of May 15, 1904, Mr. Drouin makes remarks on this application of cocaine, which endorses so well the method used by us in America, that I must consider it here in a few words.

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Referring to the first discovery of Mr. Dassonville, who uses the muriate salt, and alluding to others who resort to a solution of cocaine and morphine, both as the muriate, thus obtaining a more lasting effect, Mr. Drouin gives the minute method, which, according to Mr. Dassonville, ought to be resorted to, so as to make a methodic diagnosis.

The minute method is as follows: A first injection is made on the median and cubital nerves; if the lameness remains, it is located in the shoulder, arm or superior region of the forearm. A second injection, made on each side of the fetlock; the lameness disappears or remains. In the first case a third injection is made on each side, near the point where low neurotomy is performed, and then, if the lameness disappears, it is located in the foot; if it remains, it is located in the first phalanx. In the other case, viz., if the lameness remains after the second injection, a third is made on a level with the anastomosis of the plantar nerves, and then, if the lameness is removed, the seat is in the lower part of the cannon; if it remains, the lameness is

between the superior third of the cannon and the middle third of the forearm. Finally, to decide, a last injection is made on the cubital; if the lameness disappears, the lesion is in the region where the nerve is distributed, viz., the posterior face of the knee.

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It is certain that Mr. Dassonville has drawn all he could from the advantages offered with cocaine and morphine injections, and many experiments and observations have been required to reach this point. But is it practicable? At least twenty-four hours would be necessary to go through all these injections. "On that account," concludes Mr. Drouin, "there are all the advantages in beginning at the lower part of the leg; indeed, it is known that nine times out of ten the lameness disappears by one injection on the tract of the plantar nerves. Therefore, except in special indications, make a double injection at the fetlock; there will always be time, if the lameness is not removed, to resort at the same examination to the injection of the median or the cubital afterwards, if necessary." I believe this is our way of doing in the States, is it not?

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COLICS IN HORSES AND THEIR CAUSES.—For the past few months, a long and most interesting discussion has occupied almost regularly the time of the members of the Société Centrale in Paris. The subject of it was that of colics. I cannot review the entire subject in the limited space of this chronicle, but will, however, point out the principal points, as I find them briefly resumed in the *Revue Générale*.

In December, 1903, an excellent monograph was published by Mr. Drouin entitled "Colics of Horses and Their Treatment," in which he acknowledged that at the Compagnie des Omnibus, out of 146 horses that had died from colics, 104 had suffered with gastric or intestinal indigestion. This statement brought out at a subsequent meeting another paper from Mr. Butel, also on "Colics, and the Means to Reduce Their Frequency," in which he pleaded that "colics would be less com-

mon, if in large establishments where animals are submitted to a properly regulated régime, close attention was paid to the condition of the teeth. The veterinarians in charge ought to make minute examination of the condition of the dental apparatus and perform the operations required by each peculiar case." One step more, and before long I am sure we will have the French horse dentist making competition with the American, a few of which are already here. Mr. Butel sustained his theory later on by another communication, when he presented the reports he had obtained from army veterinarians, where attention to the teeth had reduced the number of colics in several regiments of cavalry.

In February, 1904, Mr. Jacoulet comes to the rescue. For him colics of indigestion in the army must be considered as due principally to the condition in which horses are kept, to defective alimentation and to the bad manner in which horses are watered; but, yet, if intestinal indigestion forms the majority of cases, it is due to several causes, among which the most important are, imperfect mastication, ingestion of soiled bedding, and paresis of the intestine, consequent upon overwork. Attention to the teeth has been followed by the disappearance of the colics among animals subject to them.

So far, then, improper feeding, overwork and bad condition of the dental apparatus are the principal causes of indigestion. Mr. Magnin brings out another cause: insufficiency of drinks. Horses are not allowed to drink enough, and for him the frequency of colics would be considerably reduced if horses had occasion to drink oftener.

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Truly speaking, I don't know if that long discussion has so far brought out many new facts, except probably that of the bad condition of the teeth as a cause of indigestion, and I think it is one of importance, as I have observed that dentistry is here rather behind America. If it is carried, perhaps, a little too far (yes, to the extreme, across the Atlantic), I am afraid it is rather neglected by our French *confrères*.

But, now the discussion has changed ground. We are touching on the true pathogeny of colics. Mr. Dassonville writes: "The stomachal or intestinal indigestion is most often accompanied by rupture of the stomach or of the intestine. When there is no rupture, the lesions consist in an enormous distension of the digestive compartments, with haemorrhagic doting, and at times gangrene of the walls. In the first case, death is attributed to the nocive action of the alimentary substances upon the peritoneum, in the second to ' pain, to a kind of peritonism.' "

The prophylaxy of colics by indigestion imposes two indications: prevent rupture of the digestive organs and reduce the pain. For Mr. Dassonville, the rupture must be attributed to the "expansive forces of the gases contained in the organs," more than to the quantity of food contained in them. These gases are due to fermentation, and it is in paralyzing the microbial agents of fermentation of the alimentary mass, or at least in reducing temporarily their functions, that the fatal sequelæ of their nocive action will be avoided. Puncture of the cæcum, repeated if necessary, followed by the administration of opium in large doses, 80 grammes of the tincture, are the approved methods of treatment. With it he has yet to lose his first patient.

To confirm his theory of the influence of the microbes and of that of the opiate treatment, Mr. Dassonville has recorded a few experiments which he has made and which he illustrated by the exhibition of test tubes containing cultures of microbes taken from the intestines. Some of the tubes are with and others without opium, and by them he shows that opium is not without action on fermentation, that it prevents changes of a chemical order in the solid and liquid elements of the culture, and also prevents or at least modifies the formation of gases; consequently opium must have a useful and appreciable influence against the nocive action of the intestinal microbes.

Resumed conclusions: Puncture the cæcum and repeat it, as it is without danger, and administer opium in large doses.

To which others added: "And clear the intestines as quickly as you can."

Opened in December last, the discussion is not yet closed; however, there are investigations which are pointed out, which will be made later on and which for the present are resumed by: (1) the study of the microbic flora of the intestines and of the fermentation it promotes; and (2) the discovery of the proper means to evacuate gases from the stomach.

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A SILLY ARTICLE FROM AN ENGLISH JOURNAL.—To close, allow me one question: Which is the worst of the three—the idiotic ignorance of the writer, the charlatanic standing of the surgeon (?) who allowed his name to appear in such statement, or the carelessness of the editor of a scientific paper, who allowed in its columns the publication of such a slur upon the American profession, which may not be perfect, but I dare say stands by her records as high as any other in the world? The following is taken from the *Veterinary Record* of July 2, 1904: "*American Methods.—Surgeon Farley Operates on Bacchanal to Remove an Abscess.*"—It is one thing to trephine the skull of a man and quite another thing to remove a section four inches square from the skull of a thoroughbred race horse. The man can be put under chloroform and kept quiet during the operation. Experience has demonstrated that horses and other animals do not recover from the influence of powerful anæsthetics, and owners of thoroughbreds take no chances. That is why horsemen are talking about a successful trephining operation performed recently on Bacchanal, the Rayon d'Or steeplechaser that carries Charles Pfizer's colors. The operation is declared to be a triumph of veterinary surgery. The horse was dying from an abscess over the eye, at the base of the brain. In a few days it will be galloping over the turf again. The peculiar conformation of a horse's skull makes trephining a ticklish operation in veterinary surgery. An effort was made to reach the abscess that bothered Bacchanal by probing through the nostrils, but Surgeon Oliver Farley was afraid of probing too

far and touching the brain, which would have been fatal. When the operation was decided upon Bacchanal was taken into a yard adjoining his stable and cast. His feet were firmly secured and two men held his head. It was not possible to administer even a local application of cocaine. The abscess was so close to the eye that the sight might have been endangered. The delicate instrument used for trephining a man's skull gives no idea of the large saw, manipulated by a handle that works like a corkscrew, used for a horse. It was impossible to make the incision over the eye, for a horse's forehead is as thin as cardboard. Lower down on the nose, where the incision was made, it is one-sixteenth of an inch thick. The operation lasted fifteen minutes, and Bacchanal stood it remarkably well. His gratitude, when the abscess was drained and he felt relief from pain that had been almost unendurable for months, was apparent."

A. L.

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#### THE GREAT MEETING OF VETERINARIANS AT ST. LOUIS.

The meeting of the American Veterinary Medical Association for 1904 has gone into history, and when written by an impartial historian it must be set down as the most important from many standpoints of any of the forty-one that have preceded it. It was important in that more veterinarians were in attendance than ever assembled at one place in America before; in that those who were present were absorbed in the proceedings, and maintained their seats throughout the three days' session with a tenacity never before observed; in that more additions were made to the membership than ever occurred in a single year before; in that the committees were represented by their members and were ready with full, comprehensive reports when called upon; in that as a rule the papers announced were read; and in that the discussions of the reports and papers were spirited and interesting. Committees which had in former years ignored the work assigned them on this occasion showed that much thought and considerable effort had been put forth

to make them of value to the membership. There were some exceptions, but in each case the Chairman gave an explanation showing the non-feasibility of the work which had been assigned and asked for their discharge.

Such an instance occurred with the Committee on Pharmacopeia, which has been a dead letter ever since its appointment. The publication of a work covering the subject in a manner worthy of the Association would involve such an outlay of work and money that it simply could not be accomplished by volunteer members; and unless it were of a high order it had best not be undertaken. The Association was therefore wise in discharging this committee.

The Committee on Excellence and Soundness found itself in deep water, and manfully acknowledged that the task of laying down rules to govern professional men in making examinations of animals for soundness was an unpracticable proposition. While the subject is one of extreme fascination in discussion, it is absolutely interminable, and always throws the subject back upon professional knowledge, judgment, and experience.

The Committee on Mutual Aid Association reported through each member in writing, and their conclusions were adverse to the proposition. While there are existing instances to show the contrary, there is lacking in the present case an enthusiast who is willing to take a heavy hold and push the project to a successful issue. The chief objection seemed to be in the fear of making prompt collections of assessments where the membership is so widely distributed, and it was pointed out that in these strenuous insurance days very cheap and satisfactory policies can be obtained from the many companies which are actively competing for business.

The Committee on Army Legislation had no report to make for the reason that there was no occasion during the year for active work. The veterinarians of the Army had requested that no effort in their behalf be made until a measure acceptable to the members of the service could be agreed upon; that any other action would but defeat the chances of success. Through-

out the year the "Army Veterinary Department" of the REVIEW has been a forum for the discussion of a proposed bill to be transmitted to the War Department through military channels, and it is now thought that a measure, modest in demand, wise in its provisions, has been formulated, and ready for a trial of its fate. A new committee has been appointed by the new President, Dr. Knowles, and they held a meeting before adjournment. They stand ready to assist their brethren in the Army at the latter's call, and in the manner that they may request. Enough bills have already found their way into the pigeon-hole of the Secretary's desk to warn us against attempting any other in which all are not thoroughly in accord, and it is to be hoped that in the present case every military veterinarian is convinced beforehand that the measure meets his approval, so that the work of the committee may not be stultified by opposition or indifference. By a recent order of the War Department, members of the service are debarred from activity in promoting legislation for their own advancement, but nothing in the regulations can prevent outside influences from conspiring for their benefit. So that where Congress is to be importuned they will have to rely upon their brethren in the Association.

The work of the Committee on Diseases must ever stand as a monument to their energy and intelligence. Selected with an eye to their geographical distribution, as well as their adaptability, they have each one of them contributed a report upon some important malady prevalent in their locality, and have thus contributed largely to the literature upon American pathology.

The Committee on Publication, not only pursued its specific duties of editing, publishing and distributing the excellent volume of proceedings of the 1903 meeting, but in its report to the Association made some excellent recommendations in regard to the character of the work, which were favorably acted upon by the Association and have become a part of the laws of the organization.

The Committee on Revision of the Constitution and By-

Laws performed its duties thoroughly and the Association is now in possession of a set of by-laws which are without many faults, and at least are couched in a correct English dictum, which could not be said of their predecessors.

So much, then, for the business end of the meeting. What can be said of the scientific papers presented for assimilation and discussion? They were numerous and diversified, and if we may judge by the absorbing interest with which they were received, it may safely be concluded that they were of a high order and of commanding interest and importance.

The educational question was brought forward by many sections—by the President, by the Committee on Intelligence and Education, by a contributed essay, and by a spirited discussion. That little was accomplished need not discourage those who believe the importance of the subject demanded prompt and decisive action. It is a vital question; many conflicting interests have to be considered, that more injury than benefit does not result from precipitate action; and we must be certain when action is taken that the wisest course is pursued. Upon this question the REVIEW hopes to contribute to the discussion during the coming winter, and trusts its readers who give thought to the subject will use its pages to assist in the elucidation of the problem, so that at the meeting of 1905 definite ideas may have taken possession of the members, leading to intelligent and wise action on the part of the Association.

All in all, the meeting just closed must be written down as one a long step in advance of all others that have preceded it.

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#### UNITE FOR A BETTER "REVIEW."

While the publishers of this journal are in constant receipt of letters from its subscribers attesting their appreciation of its value to them, extracts from many of which we have published from time to time, there is no doubt but that it could be made to serve the profession in many additional ways. Through the fortunate circumstance of the senior editor's residence at the

French Capital, his great interest in professional progress, and the facility with which he translates from the press of many tongues, our readers are kept abreast of the events that transpire in Continental Europe and Great Britain, while our collaborators and correspondents at home supply our pages with original articles upon every phase of veterinary theory and practice. The every-day practitioners have for the past few years recorded in the department of "Reports of Cases" page after page of valuable material fresh from the sick stall or the autopsy table, and have done their part in building up "the solid edifice of pathological science." News from the associations have been generously furnished by the various secretaries, and many other departments are well supplied with material of great interest. Through the medium of exchanges, correspondence, and other avenues of information, items of interest to the profession are gathered, and scattered throughout the journal. But the REVIEW could be made a veterinary *newspaper*, as well as a magazine of purely professional reading matter. The *news* of the profession should be recorded in it, just as it is in most of the journals of the human branch of medicine. This cannot be done save by the combined efforts of the members of the profession, and we appeal to our readers everywhere to send in along with their heavier articles, items of news concerning the progress of the profession in their vicinity, personal intelligence regarding themselves or their veterinary acquaintances, or any material that is likely to prove of interest or value to our readers. It will thus enable our readers to keep in closer touch with each other, and to know what is transpiring among their *confrères*.

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#### THE NEW YORK STATE MEETING.

Particular attention is directed to the programme of the New York State Veterinary Medical Society, which appears in this number in the regular department, as it is a very seductive announcement of good things for the veterinarian who is seeking to better his equipment of knowledge, in matters theoretical

and practical. For several years this Society has been giving its members and visitors full returns for the time consumed in attending its meeting, and this year a dividend of large proportions is declared. The clinical section of the New York State meeting has taken first rank among veterinary associations of the world, and the approaching meeting gives promise of eclipsing even its own record. The profession of the whole State, whether members or not, will be cordially welcomed, as will those of neighboring commonwealths. The REVIEW will, as usual, give its readers a full account of all that occurs.

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A FEW MONTHS AGO THE REVIEW had the pleasure of welcoming to the realm of veterinary journalism a rather unpretentious little magazine called the *Quarterly Bulletin of the California State Veterinary Medical Association*, which it hoped would prove of great benefit to the profession of the Pacific Slope. After publishing two numbers the Association abandoned it and presented its good will and title to private parties, who have changed its name to that of the *Western Veterinarian*, which seeks a wider field by asking to become the organ of all the Associations in the Western country. It is published quarterly at fifty cents a year, and Dr. Archibald is its editor-in-chief. We renew our felicitations, and trust it may meet with sufficient success to, justify its monthly appearance, and to double its present size.

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DR. A. LIAUTARD is again the recipient of high honors at the hands of the French Government. Word has just been received in New York that the Secretary of Agriculture of the French Republic has promoted him to the rank of Officer of the Merite Agricole for services rendered in behalf of veterinary science. We congratulate our eminent *confrère* upon the recognition which his long and unselfish labors in behalf of his beloved profession is being accorded him in the afternoon of his distinguished career.

(R. R. B.)

DR. G. E. NESOM, State Veterinarian of South Carolina, professor of veterinary science in Clemson College, and in charge of experimental work at the South Carolina Experiment Station, has received an appointment as Assistant Chief of the Bureau of Agriculture and Animal Industry in the Philippines, and will sail on Sept. 8 to assume charge of the new position, as the Bureau has just been inaugurated in the Islands. He was in attendance upon the St. Louis meeting of the American Veterinary Medical Association, and after spending a short time at the World's Fair, expected to proceed, with Mrs. Nesom, to San Francisco, for embarkation. Several shipments of American horses and cattle have recently been forwarded to Manila, and it is expected that they will supplant the caribou and native horses, as the latter are small and of little value. We wish him good luck in his new field, and hope he will enrich our literature with regard to the new phase of pathology opened up in the Far East.

AN ASININE SUGGESTION.—Johnson—"He said I was an addle-pated jackass. What do you advise me to do about it?" Jackson—"See a good vet."

LICENSED TO PRACTICE IN NEW JERSEY.—The following veterinarians were successful in passing the June examinations of the State Board of Veterinary Medical Examiners at Trenton, and have been duly licensed to practice veterinary medicine, surgery and dentistry in the State of New Jersey: William J. Lentz, V. M. D., Hatboro, Pa.; John H. Morse, V. M. D., Susquehanna, Pa., and Arthur H. Burling, V. M. D., Philadelphia, Pa.

THE MODERN VETERINARY SURGEON.—The absent-minded man who had telephoned to the veterinarian to come with all possible haste greeted the latter apologetically when he appeared breathless before him. "I am very sorry to have called you out, sir," he said with real repentance; "but I was so flustered at the time of the accident that I forgot for the moment that my automobile and not my horse was injured." "Oh, that is all right!" exclaimed the veterinarian in the exuberance of youth. "I am able to handle the case. After I was graduated from the medical college I took a post-graduate course in automobile repairing."

## ORIGINAL ARTICLES.

### MILITARY VETERINARY HYGIENE.\*

\* Reprinted from the *Journal of the U. S. Cavalry Association*, for July, 1904.

BY OLOF SCHWARZKOPF, V. M. D., VETERINARIAN THIRD CAVALRY,  
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The history of war, ancient, medieval and modern, is pregnant with facts which show the great losses of army animals from the ordinary causes of improper care, overwork, starvation and the introduction of devastating diseases, which have in many instances tied the hands of military commanders, and in not a few have compelled them to desist from further pursuit of a campaign without having gained the real object in view. When all branches of the military art are now studied with the object in view of preparedness for war, then the problem, how to keep army horses in the field alive, healthy and serviceable, is serious enough to warrant a special study by army officers, not only by those of the cavalry and artillery, but by all such as may be dependent upon horses for mounts or for transportation.

Few, indeed, will be those among us who can conscientiously affirm that such has been the case heretofore, or that it is now. It is true that in our army, as in all civilized armies, the subject of the hygienic care of horses is treated in a rudimentary manner under the heading of "hippology." But this Greek name implies everything and anything pertaining to the horse, but really nothing in particular about the army horse. This may be one reason why the average books on hippology still contain no more than the old conventional teachings on the conformation of the horse, which is seldom more than skin deep; a few hygienic rules of his care as regards grooming, feeding, watering; some mystic dictates on the recognition of the age by the teeth, a knowledge which is greatly overestimated in its real value by laymen; some rules and pointers on stable management, on biting, saddling, shoeing, and finally some more or less empirical treatise on the injuries and diseases of the

horse. If we follow the historic origin of these "books on the horse" in a technical library, we discover with wonder that they all have remained nearly the same in conception and extent during the last three hundred years and more. One need only to scan the pages of the "*véritable parfait maréchal*" by Solleysel (1617-1680), the similar work of Pluvine (1570-1620), with its fifty-eight luxurious cuppers on the French medieval art of riding, down to the works of the Italian riding-masters, Pignatelli (1550) and Grisone (1518), to find that we have copied much, perhaps unknowingly, from these medieval writers. As one example, it may be interesting to note that the work of Grisone contains that distorted picture of a horse which points out his blemishes and diseases, and which, after 350 years of wandering through "horse-books," has found a place of preservation in our Cavalry Drill Regulations, on page 453.

While I do not intend to assert that our chapters and books on hippology do not contain much that is needful to know by our newcomers into the army, may they be young officers or recruits, yet such books cannot impart more than that "little knowledge which is proverbially dangerous." It is more so dangerous, because the innate love of the horse makes everybody believe that he knows all about a horse and is a born rider. But our publications on the horse demonstrate that we have made little effort to throw off the shackles of empirical knowledge, whereas we should have adapted the results of modern scientific research as embodied in our present day theories of veterinary hygiene.

Some sternly practical horseman may now maintain that officers do not rely much upon the theories of hippology, but that they gain the knowledge of the horse and his care by daily practical experience in the stable, camp and on the march. There is some truth in this, but is it the whole truth? It shall be admitted that many of our older cavalry captains, of years gone by, who really received their lessons on the military care of horses in the actual warfare with the nomadic Indian tribes, were such practical horsemen. They were no hair-splitters on

theories, but common sense, hardy horsemen, who had learned how to help themselves in emergencies, even if their way was not always scientific. They could do things with their own hands if need be, and do it well. But such practical things are little understood or appreciated by the younger officers of our new army; not all of them have the liking for horses and riding that cavalrymen should have, and somehow the feeling must have crept into our arm that the little routine matters of horse management are somewhat beneath the dignity of an officer. The writer does not feel qualified to inquire into the cause of this fact, but for the sake of fairness it may be suggested that our late Philippine campaign, with its hurry and rush, and with its manifold demands for military and civil administration, has compelled our young officers to apply themselves more particularly to other matters of a purely military nature, leaving the ordinary care of the horse to others under them. This shifting of supervision, inaugurated under dire necessity, had its mark stamped upon many a troop in the Philippines, from which the service naturally suffered.

Thus it is evident that the mounted officers of our reorganized army need not only a return to a practical application of the details of military care of horses, but that it is also time to abandon mediocrity and aim at a higher standard of theoretical education in the hygiene of the army horse.

#### WHAT MEANS HYGIENE?

Dispensing with the ordinary definitions of the term hygiene and the conception of health, let us at once inquire into the fundamental reasons by which the health of horses may be preserved, and how it is endangered. Under ordinary circumstances a horse sustains itself in health if the proper necessities for the existence of his life are provided for him, particularly pure air, good food, sufficient rest and sufficient work. If one or a few of these necessities are changed or absent, then the living body at once exercises a strong tendency to accommodate itself to these changes by the inherent regulatory functions of its various organs, a power commonly called "nature." But

these regulatory functions are not always powerful enough to preserve the balance of health within the system, nor are they always strong enough to overcome the ordinary influences which may endanger it from outside, such as impure air, improper food, too little rest or too much work, and then the animal may succumb to some form of illness or another from its own lack of vigor. Still there are other, more remote causes of disease which are of an entirely different origin, such as poisons, parasites, and the manifold germs which produce disease. The theory of this danger of "bugs," humorously so termed by laymen, may not be as dark as sometimes painted by ultra-scientists, but it is greater than is generally admitted by those who are not familiar with its scientific aspect. We need only to remind our military friends of the ravages which the little "bacillus of glanders" produced among our cavalry horses in the Philippines, as also of the "parasite of surra" which could be seen so extremely alert and busy in the blood of horses infected with them. But even these and many more germs, parasites and poisons are not always positively destructive in their effects if only the animal is in a perfect, normal health. We know, for instance, that the germ of glanders is not always infectious to a healthy horse, but that its propagation and harmful influence is greatly dependent upon a weak and emaciated condition of the horse, such as is favored by insufficient food, hard work and little rest. Thus, in the army we must guard against the introduction of this germ in war when such conditions may prevail.

These few, brief scientific facts, chosen to illustrate our subject, should make it clear that we must not only understand how to provide for a few ordinary necessities of the life of horses, such as proper food, general care, sufficient shelter, etc., if we want to assist his nature in preserving his health, but we must also know how to guard him against the manifold causes of disease. In this broad sense hygiene becomes applied etiology, which means that those of us who have charge of public animals should not merely know and practice a few rules of health, but that we should also sufficiently comprehend the re-

lationship between cause and effect in the diseases of horses and their intelligent prevention.

#### MILITARY VETERINARY HYGIENE IN THE GARRISON.

Although different animals, such as camels and elephants, have been used at certain periods and under certain conditions of war, the utility of the horse has steadily grown larger for many hundred years past, and to-day the horse remains practically the only animal used in warfare. The useful mule of our army has its own virtues and vices apart from the horse, but he is so near the horse in constitution, needs and ailments, that our consideration narrows down to the hygiene of the horse. This subject is wide enough as ordinarily considered, but it certainly becomes a special study if considered from the military standpoint. Indeed, if the hygienic care of the army horse consisted merely of the teaching of his care in time of peace and in the garrison stable, then the general rules promulgated for well kept horses in civil life might be sufficient for the care of the army horse. This can be seen if we observe the reasonable care and sanitary protection given to army horses in time of peace, which has had great and beneficial results. Anyone acquainted with the hygienic conditions prevailing in the army stables of the foremost European armies must acknowledge this fact if compared with times not so far distant. Only a hundred years ago glanders decimated the mounts of whole armies of Europe during peace, a fact which is almost inconceivable for us to-day. In our own army, too, we have generally fared well in preserving the health of our horses during peace. Much of this good result is due to a sensible, natural hardening of our horses by herding and grazing them whenever possible, and by a general care at the garrison which is laudably free from artificial pampering and that exaggerated race-course-care which has partially invaded some European army stables. But we must not forget that conditions have been very favorable for our own good results. The horses used in the short Indian campaigns were mostly born and reared in the same climate and on the very soil on which they were used, so that they were practically at

home even in the field. Moreover, the isolated situation of our army posts has kept our army horses free from contact with contagious diseases, which is an ordinary cause of epizoötic diseases among horses of European armies garrisoned within cities. Finally, the employment of our horses in peace has not yet approached the intense use of army horses in drills and maneuvers which tax so greatly the health and strength of horses in the foremost foreign armies. But withal, we have learned many valuable lessons in the care of our horses, and while we have to learn many more, we need entertain little fear of ruinous diseases among our horses during time of peace.

#### MILITARY VETERINARY HYGIENE IN THE FIELD.

Granting that all civilized armies have learned how to take proper hygienic care of their horses *in time of peace*, have they also learned how to do so *in time of war*? Let us see. The very moment our horse accompanies the army into the field, he is taken out of all ordinary hygienic conditions of life which are the rule in time of peace. He encounters a variety of strange influences, such as changes of climate, irregularities of care, shortage of food, absence of protection; he has to face peculiar injuries and diseases which are practically unknown in time of peace; in short, it is the unexpected and exceptional in everything that he has to meet constantly. If these changed conditions of life arise for our horses, we have so far been unable to intelligently meet them. It is an indisputable fact that veterinary hygiene in the field is as yet an imperfect science, surely an unapplied science. One need only to study the military writers on the South African War and on our own campaign in the Philippine Islands, to be peculiarly impressed by their endeavors to explain the wasteful destruction of horses in recent wars as something unavoidable, something that goes with modern warfare and for which there is no apparent remedy. This may be so from the purely military standpoint, which considers only the results obtained and counts the loss of horses merely an incident. But those of us who had to deal directly with the

details of the causes of such losses, know only too well wherein the fault of it all lies, and we were never in doubt that the principles of military veterinary hygiene are sufficiently elastic in their scientific aspect to meet the exigencies of warfare in much the same manner as they have met the simpler and better known demands of peace.

That this is not a mere hypothesis but a practical possibility can be proven by simple facts. Many of us have been with troops on the march, in the camps and on expeditions where we had the opportunity to observe the different use and care of horses by different commanders. One troop commander may bring his horses back healthy, in fair condition and good spirits, ready to partake of the good things that come with well-earned rest; another troop commander who has done less work may return with his horses worn out in body, and broken in spirit, unable to recuperate in a reasonable time; and there have been seen detachments of mounted infantry that had done no other work than to occupy some military post and keep open connection with neighboring posts, and yet their horses were in a pitiable condition. Such observation points plainly to a common source for good or evil, which can be none other than the ability of the officer in command of such small organizations to lift himself above the mere military aspect of his mission and to attend equally well to the minor details of husbanding the strength of his horses, or at least to encourage and support by his authority those under him, whose duty it is to perform the work entailed thereby. What is attainable by a commander of a troop ought to be possible for commanders of larger organizations, and there are held out as example the lives and deeds of great cavalry leaders of different nations who knew how to save their horses by judicious care, while others ruined them by neglect or want of knowledge of the hygienic care of horses.

Perhaps some grim warrior may object to such views as sentimental, and maintain that sentiment has no place in an army, and that the life of a horse is not worth considering when a great result is at stake. This assertion has become a military

phrase. It is not denied by anybody that a horse's life has no such intrinsic value as the life of a soldier, as it represents only a money value to the government; but that is not the real question at issue. The main object of military veterinary hygiene simply is to save as many serviceable, well-trained horses as possible in order to have them on hand and ready for work when such a great result is really at stake. That results are often imagined as greater than they are, or at least estimated as greater beforehand than they prove to be afterwards, is one of the errors of military enthusiasts, who are blindfolding themselves in the pursuit of one object alone. In so doing they lose sight of other issues and their consequences, one of which is the husbanding of the strength of their horses. When these break down prematurely or are entirely lost by diseases, then comes the cry for new mounts. But new horses are seldom procurable in the field on short notice or in sufficient numbers, and when they finally arrive they prove to be raw, unbroken animals of inferior quality, because purchased in haste, unacclimated and emaciated from a long journey; in fact a hindrance rather than a help in any further movement. This was our experience in the Philippine campaign, and we read that it corresponds with the experiences made during the South African War.

Thus coming down to naked facts, it is not sentiment that aims at the preservation of horses in the field, but a prudent, intelligent foresight developed from adverse experience. The correctness of this contention is acknowledged by many calm and considerate cavalry leaders of different armies, but it would lead us too far to cite their good advices. They have learned that the old proverb, "An ounce of prevention is worth a pound of cure," is not an empty phrase, but that it constitutes an actual truth, by which the modern notion that war necessitates the waste of horses is proven a fallacy that can be successfully avoided by true knowledge and careful attention.

It is not denied that the causes of the losses of horses in the field are many. It is impossible even to mention them all in the infinity of combinations which actual field service presents.

But it can never be difficult for one thoroughly instructed in veterinary hygiene to ascertain their cause and devise means for their further prevention. Yet, mistakes must not be made as to the real cause. One of the common errors is the accusation of shortage of food. This is a calamity. Still, a horse can subsist on comparatively little food for weeks, and even for months, and while he may become poor in condition from losing his stored up fat, yet he can remain healthy and in good spirits and in fair shape for work, if he is only otherwise treated reasonably. But by far the surest and most common cause of the "break-down" of horses in the field is ruthless overwork, absence of sufficient rest, and a continued worry of the animals by that excited rushing and pushing forward which is supposed to underlie the gospel of offensive tactics. A horse can be ridden to death in less than a day by a man who fancies that riding means a perpetual struggle between man and beast, or who is ignorant of the limits of its endurance, or who is anxious to save himself from undue exertion, or who considers the horse merely an automaton furnished to him by a rich government. We are not unmindful of the fact that at times the horse is at fault and not the rider. There are excitable or dull brutes in the ranks, with whom neither patience nor kindness will avail, and we have often enough known other horses that are totally unfit for the military service by faulty conformation and weak constitution. For this the government is responsible by a faulty system of providing remounts. But nowhere is good horsemanship quicker shown than in the field, and fortunately we have always natural horsemen in the ranks who, by their good temper and love for the horses, bring them through a whole campaign alive, healthy and in good spirits, no matter what the hardships may have been for both riders and horses. It is only a pity that such natural horsemen are so few, even in the cavalry.

#### THE PURCHASE OF REMOUNTS BY CONTRACT.

It has been already indicated that, great as the responsibility of individual commanders of mounted troops is as regards pru-

dent horse-management in war, they cannot always alone be held responsible for losses of horses from premature breakdown by field work or disease. We must look to our government to make proper provisions and allowances, and to the supply departments to properly supply them. One of the most difficult problems is the purchase of suitable mounts for our cavalry. This problem is an old one in our army, but remains unsolved. It has been partially solved by but few European armies, and this only after adverse experience in many wars, dating back hundreds of years. The systems of remounting established by these armies, frequently incorrectly reported, are those of direct or indirect breeding of their army horses. Russia is the only country which has gone so far as to directly breed her own cavalry horses, at least in part. Germany, Austria-Hungary, France and some other countries, have chosen to assist their natural breeding districts by supplying them with suitable stallions bred in the government studs. This latter system is beyond dispute the most noteworthy. It does away with the fruitless discussion of what constitutes a suitable cavalry horse in theory, on which no two officers can agree. It fixes a certain type as most suitable for military purposes, because the sire is bred on such lines of conformation, soundness and intelligence as have proven most valuable in war, and the mares to be covered must conform to a certain standard of breeding and soundness. This system may appear as paternal to us, but it is nevertheless wise, as few breeders would properly mate the sire and mare if the choice were left to them. Thus the armies mentioned are enabled to procure annually a sufficient number of horses, whether horses are scarce or plenty, and they receive a uniform class of horses which are sound by heredity. This latter point is of enormous advantage. In the purchase of remounts from a contractor or dealer, as is the case in our army and in the English army, no such certainty of inherited soundness is possible. We can find a horse sound as he stands; but how soon he may become unsound by ordinary military use no one can foretell. True, there are certain positions of the leg

and formations of joints which probably indicate an inherited predisposition to certain forms of unsoundness, but how few of our inspectors and veterinarians are able to recognize and properly judge such infirmities, which, after all, are based more on guesswork than on real and accurate knowledge. From this reason we have in our army an unproportionally high percentage of horses for periodical condemnation, which few armies and few countries other than ours could afford to pay for. But with all this expenditure of money we are entirely unable to procure even a middle class of horses which are uniform and serviceable, because our remounts come from different sections of the country and of different stock. They generally range all the way from fair horses to the worst scrubs, entirely dissimilar among each other in conformation, size, weight and intelligence —a sorry lot to look at and a worse lot to ride on.

Much has been written on this subject in our military journals for years past, and some excellent suggestions have been made from time to time to remedy these defects. But we have been told by our horse-breeders that any system of breeding our cavalry horses after European fashion will be looked upon by them as un-American, and that our country is well able to supply all horses we shall ever need in time of peace or war. As such opinion must have a certain weight with our government, it would be impolitic at present to dispute this point, and we shall have to look for the next best method of supplying our army with suitable remounts.

#### REMOUNT DEPOTS.

There is only one substitute which can be regarded as at all promising good results in remounting our cavalry, and that is the establishment of remount depots. It has been announced that Fort Riley, Kansas, has been selected for the location of such a depot, because this post is a natural center of our army, it lies near some of the best breeding districts of saddle horses in the country, and its large reservation secures ample room for the erection of the necessary buildings. As we are new in such an enterprise, a timely warning may be permitted not to copy

too close the old plans of the European establishments, to cram together a few large stables in a comparatively small area. This is against all principles of veterinary hygiene, and has had its disastrous results in fostering the peculiar diseases of remounts which are bound to develop among young horses. There should be plenty of room everywhere, with a number of smaller stables and several isolated veterinary hospitals, with running yards, paddocks, and pastures for grazing. Only with all these points skillfully observed will we succeed to develop colts into well-grown cavalry horses, for that is the real object of a remount depot in peace. Of course, we may purchase four-year-old colts at the start, as we have done so frequently, and allow them to fully mature instead of prematurely ruining them in the ranks. But we shall soon learn, as most European armies have learned, that we are obliged to purchase younger animals, because a fairly matured four-year-old colt is eagerly bought up by dealers everywhere.

It will also soon be found that one remount depot is not sufficient to supply the needs of our largely scattered army, and at least two more will have to be established, one in the East and one in the far West. With these remount depots in successful operation, under skillful management, we shall have taken quite a step toward better mounting our cavalry. Yet, if the history of the remount depots of some European armies may teach us anything, we shall then be slowly drifting towards breeding our own stud horses or even our own cavalry horses, for which a bountiful nature has given us better opportunities and greater facilities than any European army possesses, except perhaps Russia. The indicated result will be sure to come as soon as we have learned in our army more about the breeding and rearing of cavalry horses, a knowledge which experience in the remount depots will gradually teach us. Moreover, the selection and collection of horses by the remount depots will not be found to be above criticism by the regiments, because there will never be a time when our private horse breeders will fully understand the particular purpose of a cavalry horse, and only

by breeding for this purpose can such a horse be produced and can such a breed be established in this country.

#### THE QUARTERMASTER'S DEPARTMENT AND THE ARMY HORSE.

There is no department on whose efficiency and willingness depends so much the welfare of our army horses in peace or war as the Quartermaster's Department, because it furnishes in our army not only the horses but everything that pertains to their well being. In peace this department works smoothly as regards the supplies needed and allowed for horses, but in war it is not always successful in accomplishing its purpose. In the earlier Philippine campaign, just as in the South African War, our horses had no oats or hay, the food best suited for their health and labor, and they had to subsist on rice and native grass, a strange food and not always a proper one. For quite a time there were also no horseshoes, and when these arrived no shoe nails were sent with them, neither did we have at first veterinary medicines and dressings. All these are supplies that should go with the horses when they are shipped, and their issue should be kept up without interruption.

It is one of the oldest experiences of armies schooled in warfare, that the supplying of food for men and horses in the field is the most difficult task to perform. There are many instances recorded in military history where this has been evidently impossible, and the results have always been disastrous in great loss of men and horses. It is certain that we have made no great progress in the transportation in the field, and our most modern appliances, such as the automobile, give little hope of a reliable means of improvement. These machines may be of certain use in maneuvers and even in war in the old, settled countries of England, France and Germany, which possess a network of excellent country roads, but for warfare in semi-civilized or unsettled countries where good roads and bridges have not been built, they must be regarded as hopeless playthings. It is worth remembering that the commanders of smaller mounted organizations in the Philippine campaign soon learned again the value of the pack-mule, thus returning to the most ancient system of

using "beasts of burden" as practiced by the armies of Greece and Rome, by the Crusaders, by Wallenstein in the Thirty Years' War, and by Frederick the Great in the Seven Years' War in Silesia, not to forget our own constant use of the pack-mule in the Indian wars, especially in mountainous districts. The great drawback of the cumbersome transportation by heavy wagon train lies in the fear of everybody that they may get stuck in a bad road, and may not arrive in camp until after dark, if at all. All of us know that these occurrences are common. This feeling of unreliability is the cause of the overpacking of horses with articles that are not intended to be on the saddle, and which help to cause not only sore backs but a speedy breakdown of the animals. It was often a memorable sight in our Philippine marches to see the troops start out of camp with the saddle-bags extended to the breaking point with things that should not be seen, overruling the carefully laid down regulations about the equal distribution of weight of the cavalry saddle as it is packed in peace. And yet with all these "unavoidable" weights some troop commanders would wonder how their horses acquired sore backs. True, this overpacking of horses in the field is the only means at present to keep mounted troops mobile and independent, but it is certainly done at the expense of horse flesh, horse spirit and horse life.

Thus, with all the display of modern equipments, we have as yet no adequate improvement in the simple transportation of the necessities of the soldier in the field. It is for the Quartermaster's Department to devise some light, movable and reliable contrivance for future campaigns, that will unburden our over-packed horses, and keep our mounted troops serviceable for a longer period. Until such has been invented the ancient pack-mule must remain the only reliable camp follower, the only source of comfort when he promptly comes into camp with that joyful bray, the equal of which will never be heard by any soulless machine contrived by mankind.

#### THE PREVENTION AND SUPPRESSION OF CONTAGIOUS DISEASES.

While in time of peace the necessity for the prevention

against the introduction of contagious diseases of horses is not a frequent occurrence from the isolated location of our garrisons, the danger of infection is ever present during a mobilization and as soon as horses are transported by rail or over sea, resting perhaps here and there in corrals for short intervals. Intelligent foresight and diligent watch should then be employed, and prompt measures for the suppression of contagious diseases must be taken at once. That in our mobilization during the Spanish War, and later in rushing horses to the Philippine Islands, we have taken such intelligent precaution, must be denied. The camps at Chickamauga soon became hot-beds of glanders. At first the old, ever repeated doubt arose, whether the disease was really glanders or not, a doubt incurring the loss of valuable time for prompt action. When this doubt was overcome, then the carnage by the bullet and the butcher-knife began, whereas under the light of modern veterinary hygiene most of the horses, at least many of them, could have been saved by the intelligent use of mallein, by prompt and correct isolation, and by a thorough disinfection of the infected corrals and picket lines. Nor was any lesson learned from these occurrences. True, attempts were made at San Francisco to test the horses to be shipped to the Islands, with mallein, but this was done in a crude manner by crude men, and again many horses were killed on mere suspicion.

Whether glanders was indigenous in the Philippines or whether it was first introduced by our troops, has been a point long disputed but never definitely ascertained, but there has been a tendency to blame our officers of mounted commands for its introduction. But even if it was so introduced, it was the fault of our system, or rather entire lack of any system, to prevent such occurrence, and military officers who happened to be responsible for horses, should not have been accused for its failure to work. The only persons responsible for such matters can but be the army veterinarians, provided that they are educated professional men, and as such placed in a position where they can give intelligent counsel to the proper military authorities. This

is the only safe and correct standpoint, because it is impossible that any military officer, however experienced he may be in the care of horses in garrison or in the field, can have a correct knowledge of the specific pathological lesions of this disease which would enable him to make a positive diagnosis. This knowledge can be acquired only in the post-mortem room and in the histological and bacteriological laboratories. Of course I have met a few officers who thought that they "knew a case of glanders when they see it," but I have never yet seen one of them step up to a diseased horse to carefully examine him in order to verify his suspicion. Neither can any reliable veterinarian make a diagnosis at such a respectful distance, but he must open up the nostrils of the horse, which are often glued together by a sticky and fetid discharge, use a reflector if necessary, and take the risk of having a few millions of bacilli sneezed into his eyes or nose. How often has the writer earnestly tried to convince members of boards of survey that a horse was really diseased with glanders by opening for them the nostrils of a horse, but few officers would venture near enough to see for themselves. While such abhorrence of a deadly disease is perfectly natural in laymen, it shows that after all, these officers had to write their signature "on the best of their belief," relying on the knowledge and integrity of the veterinarian and on his opinion. As this is very much the same with some other diseases of horses, it is clear that in such crucial tests the veterinarian ought to be the responsible expert and not the military expert the responsible veterinarian.

On the whole it must be confessed with sorrow that our dealing with glanders in the Philippines was most crude, bordering on many occasions on the lowest empiricism, unworthy of an educated army. The main cause of this state of affairs was the absence of qualified army veterinarians in the early campaigns, and the hiring by the Quartermaster's Department of impostors who masqueraded under the title of contract-veterinarians, but many of whom proved to be missionaries, homœopathic physicians, wheelwrights, teamsters, and "men born and raised on the

stock ranch." Such were the "experts" given to officers responsible for horses and mules to control and stamp out an animal scourge. The result was that the disease spread with rapidity and soon assumed alarming proportions throughout the Islands. Then came the stop of the disease by order, informing us that "as a rule tropical glanders is not dangerous like its prototype in the United States and animals affected with it will usually recover with treatment. The wholesale destruction of public animals should cease." No doubt there were instances of ruthless and ignorant killing of horses by the advice of the men enumerated above, but there is also no doubt that the true, old-fashioned glanders had eaten itself deeply into our horses and mules, perhaps more so in some districts than in others. So the above well-meaning, optimistic opinion came to the afflicted as a thunderbolt, because it was so much at variance with the true condition, and could not have emanated from a thoroughly informed expert. By this time the disease was well under control in some districts, and its ultimate suppression only a question of time. This had been accomplished by the intelligent work of a few educated army veterinarians, backed by their commanding officers who had seen for themselves the ravages of the disease. But glanders had been declared under ban and it ceased at once to be heard from. No officers responsible for horses were further willing to report even the suspicion of glanders among their horses.

But heaven came to the rescue of the oppressed. All at a sudden "surra" was discovered in Manila. The news came from the "Army Pathological Laboratory," an acknowledged scientific body. This new disease had a mystic but clean name; it was not spread by the carelessness of officers and men as was the case with glanders, but "flies" carried the infection, and who can stop flies. It was a deadly disease, but as no successful treatment was known there was excuse for the dying of horses. The symptoms "resembled" those of glanders, so that "the casual observer" could make a mistaken diagnosis of glanders instead of surra.

Of course, no army surgeon will diagnose small-pox or bубonic plague by "casual observations," but the surgeons of the Army Pathological Laboratory evidently believed that a veterinarian in making a diagnosis of glanders is a mere "casual observer." So again the advice given to our military authorities was that of medical experts and not of veterinary experts. They were correct in their detection of the "parasite" of surra, but they were wrong in bringing it into connection with glanders, which is a totally different disease. But the new disease fitted the occasion admirably, because it was officially sanctioned, and supposed outbreaks of "surra" were forthwith reported from different garrisons where glanders had been rampant. Bound for God's land, the writer was thrown back for long, weary three months investigating supposed outbreaks of surra, and to stem the tide of this new disease in the minds of its converts would have killed a man with seven lives.

What should we learn from these experiences? Firstly, that in dealing with deadly contagious diseases of horses in the army, our military authorities should not depend upon half-educated veterinarians, troop-farriers and hired impostors, which is worse than relying on the redemption by a merciful fate, as done by the army commanders in medieval times. Secondly, that our general officers should be given the assistance of educated, experienced chief-veterinarians, whose duty it should be to investigate the outbreaks of such diseases and give correct and reliable information and advice. Thirdly, that instruction in veterinary hygiene be extended to all officers of the army, including those of the Quartermaster's Department and of the infantry, both of whom are so often responsible for horses and mules in the field, in order to secure their intelligent coöperation in the suppression of the contagious diseases of horses and mules and in the prevention of their unchecked spread.

The object of this article has been to paint with a few strokes of the pen some shortcomings, mistakes and oversights, which are apparent in our army, and to suggest their amelioration. The criticisms made were born of careful observation,

unprejudiced thoughts and good will. There is no army in the wide world which is perfect, even if things look well nigh perfect on their surface, and ours has certainly its shortcomings on the subjects touched upon. It is hoped that our military commanders, high and low in rank, will come to acknowledge the value of a higher knowledge and better practice of veterinary hygiene in our army, for tactics and strategy alone cannot win battles and campaigns, but they must go hand in hand with a wise appreciation of the eternal laws of nature as demanded in the hygienic care of men and horses, both of which go to make up an army in the field.

MURRAY HOWE'S EXCUSE BOOK.—Murray Howe's Excuse Book with 69 excuses, "Why He Didn't Win," is taking like hot cakes. Here is an excerpt from the work which is well worth reading: It would take a mighty big book to hold all the excuses that's ever been thought of, an' perhaps I better not write nothin' but real hot ones. I won't go farther than number 1744, but that's far enough to make a book that'll get the coin, an' get it in chunks. Right after each excuse I'll tell just how they ought to be used, like this: Excuse No. 63—Jumped-the-shadows. Never use this one on a cloudy day. No. 64—Hit-the-sulky-with-his-hocks. Never use this one when the hoss is hooked to same sulky he has pulled for two years. No. 65—Got-hurt-in-the-car-coming-over. Never use this one when your horse worked in  $2:13\frac{1}{4}$  the day you unloaded him. No. 66—Ben-Walker-fouled-me. Don't use this one when you was last all the way around. No. 67—Blacksmith-cut-his-toes off. Use this one any time an' often. No. 68—Threw-a-toe-weight. Use this one when you are sure the boys did not forget to put 'em on. No. 69—Track-did-not-suit-him. Never use this one when all the heats are better than  $2:12$ . I guess a book like that wouldn't put the stud book an' the dictionary an' the Bible behind the flag, would it?

COLLEGE ANNOUNCEMENTS RECEIVED.—We acknowledge the receipt of the announcements for 1904-05 of the following veterinary colleges: New York-American, New York State, Kansas City, Chicago, Ontario, Indianapolis, Iowa State, Ohio State, San Francisco, and Laval.

## WHEN TO OPERATE.

BY L. A. MERILLAT, V. S., CHICAGO, ILL.

A Paper presented to the 41st Annual Meeting of the American Veterinary Medical Association at St. Louis, Mo., Aug. 16-19, 1904.

The dearth of so-called "popular papers" presented at these meetings is a mere condition of circumstances and not the will of the few, as is so frequently intimated in heart-to-heart talks with members of the Association. The capable writer finding it distasteful to present a paper here that does not compare favorably, from a scientific standpoint, with those which delve deeply into the realms of mystery and are adorned throughout with high-sounding technical terms, leaves the task alone and comes to the meetings year after year to hear only the years' revelations of the field and laboratory. He goes home proud enough of the progress of his profession, but without additional knowledge as to his daily vocation. Furthermore, the selection of an appropriate subject is a perplexing problem to the practitioner. The discussion of generalities or history would be only a repetition of matters of common knowledge to the profession. Specialization on any one disease or operation, in the absence of new acquisitions, is but a dry, uninteresting reference to details that should be made to reach the profession through other channels, the lecture room, the professional journal, the college bulletin, the local veterinary society or the text-book. The practitioner feels that the valuable moments of the Association cannot be spared to the disbursement of details that are impossible to retain in the memory and that would interest but few. General thoughts and discussions in surgery are probably intensely interesting and instructive even to the layman, but special topics interest the surgeon alone. The deliberations of a surgeon among surgeons excites the greatest attention, but the deliberations of a surgeon among physicians and sanitarians always fall flat, and might be likened unto a shoemaker describing his craft to an association of college professors. His audience might applaud his general remarks on the shoe industry,

but would yawn at his most crucial effort to describe the making of a shoe. Hence the unpopularity and scarcity of the "popular paper."

This paper is not presented with the intention or expectation of presenting any new ideas, but more for the purpose of referring to the grave dangers of "the knife" as a therapeutic weapon when applied promiscuously and without a most scrupulous regard for the selection of proper indications.

In approaching the subject of surgery two propositions are encountered: the first, "When to Operate," and the second, "How to Operate." The first involves the science of surgery, and the second the art. The first embodies knowledge of disease processes and sound judgment in diagnosis plus an abundance of strategy and common sense. The latter requires manual dexterity, mechanical ingenuity and skilful manipulations, all of which are useless attainments without a knowledge of the proper time and opportunity to apply them. In view of the crudeness and grossness of the veterinary surgical operations, and the ever present opportunity the veterinarian has to learn surgical technics, the proposition of "How to Operate" does not stand in the way of rapid advancement in veterinary surgery. Observations from a teacher's standpoint have constantly revealed to me the fact that veterinary surgical operations are readily mastered by students. A little manual training on incisions, dissections and haemostasis, followed by exercises in the various operations that occur in the routine of practice, readily transforms a whole class of students from novices to very creditable operators. So simple is the art of veterinary surgery that any enthusiastic student who applies himself diligently for a brief period of manual instruction, soon reaches an admirable degree of perfection. It has been further observed that such a student does not always become a good surgeon, although he has admirable attainments in the art of surgery; secures his patients well, masters them perfectly, administers the anæsthetic with confidence, and then carries out each step of the operation with perfect precision, the results are too frequently a disappointment,

from his deficiency in the solution of the proposition "When to Operate." A good operator, especially an enthusiastic operator, is seldom a good surgeon, while the awkward operator with a better judgment of the proper time to operate, usually evolves into a good surgeon of great and lasting reputation.

The wild enthusiasm for surgery that ran riot in the medical profession a few years ago has now given way to its more conservative application, and as a result human surgery has reached the high plane it now occupies. Should veterinary surgery follow the same course, the transformation toward conservatism should come early if we profit by the lesson taught us in the history of human surgery.

This is the day of surgery; the laity is alive to its possibilities and its importance; the live-stock interests of the country demand its application more and more to the diseases which medicants have failed to conquer, and much better recognition is given the veterinarian who operates well, than to the one who avoids surgery. But may not these high-sounding notes of encouragement prove its undoing if more attention is not paid to its proper application? From the writer's point of observation it is very evident that the immediate future of veterinary surgery will be largely in the hands of the new recruits into the ranks of the profession, who have very high attainments in the art of cutting neat holes into the bodies of animals, but who, owing to the deficiency of their professional training in the science of surgery, will not utilize the art to the best advantage.

Granted then that the simple proposition of "How to Operate" had been well mastered by the members of the profession and that our greatest difficulty lay in the selection of proper indications, along what line should we exert ourselves to bring the greatest credit to the surgical branch of veterinary science? It is very evident here that the perplexing problem of diagnosing surgical diseases is the principal obstacle in the way of reaching logical conclusions as to whether a disease is amenable to surgical treatment or not, and that it is in this direction we should seek more light. Diagnosis, besides being a seemingly

impervious wall across the path of progress in veterinary surgery, is also a neglected branch of our learning. The obstacle must be surmounted by better education of our members in all the sciences which appertain to veterinary medicine. We need as fundamental learning, to lead us to and through the desired goal, better general education, and longer and better curricula in the professional school. We need more botany, zoölogy, biology, chemistry and physiology to broaden the mind and to give the student a better understanding of the domestic animals, their habits, nature, capabilities and idiosyncrasies, as a basis upon which to build the study of pathological processes. The exaction born of a desire for betterment of our craft should lead all members of the profession to join hands in the effort for higher education and higher attainment in the sciences taught in the veterinary school.

First, I would warn the surgeon against error of speaking lightly of the dangers of surgical operations. Assurances that "there is absolutely no danger" in any given surgical operation is a display of poor diplomacy, as the element "danger" is ever present in surgery, and, besides, such expressions are deceitful and may even be regarded later as a cunning method to gain permission to apply surgical treatment. To protect a surgical operation against condemnation, the inevitable dangers and sequelæ require elucidation as well as the advantages. A frank admission that 1 per cent., 2 per cent., 5 per cent. or 25 per cent. of a given procedure are failures or fatal always makes a mighty convenient post-mortem refuge. Patients have died from haemorrhage following the extraction of a tooth; from septic infection following the ablation of a small tumor; from the application of local and general anæsthetics; from heart failure produced by the mere application of a twitch to the nose; from internal injury, fractures and strains incident to surgical restraint, etc., etc., *ad infinitum*. It is therefore evident that the veterinary surgeon, in justice to himself, has a very important duty to perform in this connection before resorting to surgical intervention. This warning does not signify that these dangers

should be emphasized, magnified, or elaborated upon unnecessarily, yet when an important operation is contemplated it is our plain duty to forewarn our client, as well as forearm ourselves, and abandon the custom of referring to surgical operations as trivial affairs. To operate only when our clients are aware of the inevitable dangers of surgery is the first lesson this paper aims to teach.

Second, I next desire to emphasize the importance of subjecting surgical patients to a perfect, methodical physical examination at the time of diagnosis as well as at the time of operation. To operate upon a patient without regard to age, sex, disposition, temperament and condition of the vital organs is a sin of omission that will lead to a large percentage of unfortunate circumstances. No patient must be led to the operating room for even a simple operation before a physical examination is made, as such examinations and investigations frequently reveal conditions which necessitate a complete change of method or even postponement of an operation, and, besides, the precaution cultivates method and circumspection, which are two valuable traits for a surgeon to possess.

Disregard for the surgical patient's age may result in the fracture of the spinal column in the aged animal or an epiphyseal separation of the femur in the very young animal. Neglect to note sex may result in abortion in the pregnant female or augmentation of an over-looked hernia in the male. The surgeon's personal safety as well as the patient's well being demands a consideration for the disposition and temperament. The full stomach, the distended bladder, the asthmatic lungs or the abnormal heart's action are conditions demanding due and timely consideration. The full stomach and bladder are seldom ruptured in a surgical operation but the distress caused by firmly securing animals in that condition augments shock, interferes with the heart's action and frequently produces violent colics; and the administration of a general anæsthetic under such circumstances is a fool-hardy act on the part of the surgeon as it is hazardous to the patient.

The following is an enumeration of a few kinds of animals in which surgical operations are attended with more or less danger:

1. *The Nervous Old Horse.*—The old horse that will offer violent resistance to the necessary restraint should always be an unwelcome guest in the operating room. Such an animal will usually inflict upon itself some injury to the locomotory apparatus and will always arise from a prolonged operation in a frightful state of surgical exhaustion.

2. *The Idle Horse.*—Idleness for a few days preceding an operation may result in an attack of azoturia as the operation progresses, and protracted idleness especially in fat animals creates an obesity of the internal organs from which an experienced surgeon will shrink. The administration of anæsthetics in such animals yields a large percentage of fatalities and prolonged painful operations; without anæsthesia produce distress, shock, heart failure or colics, to which not a few will succumb.

3. *The young horse or ox* between the age of six months and two and a half years when restrained with more or less freedom of the hind extremities will occasionally separate the diaphysis from the epiphysis of the ferum or tibia.

4. *The "heavy" horse, the "roarer," the "dummy,"* the horse that never lies down, the horse having osteophytes on one or more articulations, and the fat aged dog should not be omitted among the unwelcome surgical subjects.

These recommendations are as old as veterinary surgery itself, but are of sufficient importance to merit constant repetition. They are referred to here as the second lesson this paper aims to teach; namely, to operate only after subjecting patients to a rigid physical examination.

Third. I desire as a third recommendation to emphasize to the importance of respecting our client's financial interests, which owing to the commercial nature of our calling has an important bearing on the proposition of "When to Operate." I would first admonish the surgeon against the too free recommendation of operations having a high rate of mortality. While

recognizing the fact that serious capital operations occasionally bring great credit and notoriety, the final results of resorting too freely to such operations is always disastrous to a surgeon's reputation and detrimental to surgery as a whole. The custom of resorting to surgical intervention as a last resort when medical treatment has failed and the patient is in a dying condition, is an injustice to surgery and is always a display of mighty poor strategy. To incur the expense of a costly capital operation when a patient is in a dying condition, with no possible chance of recovery, warrants the condemnation such an undertaking usually receives. Again, operations that are knowingly unprofitable must be avoided. To gain favor for an operation, its cost plus the expense of the period of convalescence must be taken into account. The surgeon in this connection is at a disadvantage over the physician, because positive results are expected of surgery and the surgeon is expected to know the outcome of his operations, while the physician may continue to "dose away" indefinitely without censure. Finally we would advise against the application of operations in which success is the exception and not the rule, to avoid new, untried procedures described from time to time in current literature by over-zealous writers and to adhere strictly to those procedures that have been tried and found worthy and which may be defended as the usual and customary form of treatment of the disease to which they are applied. Experiments should be left to the teacher or performed upon worthless subjects, and only operations that are profitable to our clients should be adopted in the routine of practice. "So endeth the third lesson."

With the universal observance of these general recommendations which should be obeyed in each and every surgical operation, the further consideration of our title must deal with the diseases and operations themselves. As procrastination is both a virtue and a vice in surgery, the answer to the question "When shall we operate" will vary with and in each surgical disease, but since this paper cannot cover the entire field of surgery, only a few diseases and operations will be submitted. These are

selected on account of their importance, frequency of their occurrence, or recent adoption.

#### PNEUMONIA.

Ordinarily, pneumonia is not found in the category of surgical diseases, and so far as the lesion itself is concerned, it does not deserve such classification. Necrotic sections and abscesses in the human lung are now freely assailed by surgery, but in the horse the anatomical arrangement of the thorax prevents such intervention, and in the other domestic animals other obstacles intervene. The purpose of referring to pneumonia here is to revive the old treatment of blood-letting for this fell affliction. The revelations of the past few years have shown the utter helplessness of the physician in the treatment of this disease, and that the pneumonia patient must sink or swim on his own vigor. In view of this fact and the continued prevalence of pneumonia throughout the world, all manner of treatments have been attempted in the human hospitals, among which is blood-letting. The operation is not performed with the old object of curbing the disease in the early stages, but to relieve the heart's labor in the later stages. Its application in the horse has revealed the fact that it has at least nominal value when applied under proper circumstances. It is harmful in the first stages of any pneumonia and throughout the entire course of broncho-pneumonia. Its indication is the later stages of croupous pneumonia, where the patient is threatened with death more from a failing heart than from the pathological lesion itself. The unilateral case, involving an entire lung, or the bilateral case, involving about one-half of each lung, near the eighth day of the disease approaches a description of the proper indication. From one to two gallons of blood is extracted from the jugular vein, after which the heart takes on new vigor, the respirations become less labored and the temperature drops several points. The operation is based on the principle that the volume of blood of the pneumonia patient is too great for the diminished lung capacity, and is therefore only a burden to the heart. It is claimed that if the volume of blood could be diminished as the lung capacity

becomes more and more limited the mortality of uncomplicated croupous pneumonia would be materially lessened.

#### PERIODIC OPHTHALMIA.

Recent revelations in the etiology of specific ophthalmia have placed it within the field of surgical treatment. It is mentioned here because it is another disease that would not have been thought of in surgery a few years ago, and because it is one of the very important conditions encountered by the veterinary practitioner. The surgical treatment of this disease consists of the simple evacuation of the aqueous humor by puncturing through the cornea at its inferior margin. The proper time to apply the operation is after all the inflammation of an attack has subsided, and never during the course of the inflammatory process. In lenticular adhesions or opacity of any of the transparent ocular organs the operation is of no value, its object being to prevent such structural changes by evacuating the purulent matter that precipitates to the floor of the anterior chamber after each attack. The same operation performed at the superior aspect of the corneo-sclerotic margin is of little value. If the operation is performed at the inferior aspect of the cornea, when the inflammatory process has subsided and before there is any structural changes in the globe the results are satisfactory.

#### FISTULA OF THE WITHERS, POLL-EVIL AND QUITTOR.

These three refractory diseases are taken together because of the similarity of their nature as well as the similarity of their surgical treatment. They consist of intense infective inflammations and are refractory to treatment because of the poor nourishment of the structure primarily involved and the anatomical peculiarity of their locations. In the early years of our surgical career it was our habit to postpone the surgical treatment during the first stages, or, in other words, while they were being transformed from abscesses to fistulæ. The habit of applying palliative treatment, which is widely practiced in the profession, we have found is productive of much harm, in permitting a wider dissemination of the purulent secretion. The very

evidence of a painful swelling in the poll, withers or quarters should be met with a bold incision to and through the forming necrotic centre. It is remarkable how frequently such a course will reveal a slough of the supraspinous ligament, ligament nuchæ or lateral cartilage, which when removed will cut short the disease to the brief time required to heal a simple wound. Procrastination in these diseases is always harmful, while immediate surgical treatment frequently brings prompt relief.

#### CONGENITAL LUXATIONS OF THE FEMERO-PATELLAR ARTICULATION.

This abnormality is a disease of the young, occurring shortly after birth. A per cent. of patients thus afflicted recover satisfactorily with hygienic and dietetic treatment, while others retain the impediment through the early months of colthood and even to maturity. Surgical division of the internal straight ligament of the patella is a perfect cure for this condition and should be applied as soon as it becomes evident that there will be no prompt spontaneous recovery. This operation originated with an Italian veterinarian, whose name and connections I have forgotten. It was condemned as a dangerous operation by Möller and Dieckerhoff, who found it difficult to perform without wounding the secreting membrane of the articulation. The operation was introduced to the clinic of the Chicago Veterinary College three years ago, since which time several hundred experimental operations have been performed without accident owing to the adoption of a new technique, which has been described in the *Quarterly Bulletin* of that college. Three cases (they are few in city practice) have been operated upon, each successfully, and the students who have been taught the operation during the past three years have reported many cases, with no adverse results.

#### GOITRE.

The seriousness of goitre as a blemish to the valuable domestic animal, as well as its frequency, creates a mighty inviting subject to the student of surgery. But goitre being usually bilateral their removal has not been attempted owing to the

post-operative necessity of feeding the substance of thyroid gland to maintain the health, and owing to the great danger of primary and secondary haemorrhage. To overcome both of these obstacles enucleation of all but a small portion of both glands is recommended. A very small portion of the gland will suffice to maintain the health. Goitre in the mature animal large enough to produce a marked blemish is the proper indication for the operation.

#### DENTISTRY.

We refer to dentistry chiefly to condemn the indiscriminate trimming and filing of the horse's teeth. The veterinarian of to-day, especially in America, seems to be cultivating an inclination to deal with the enamel points at the extremity of the longitudinal ridges of the herbivorous molars (sharp teeth) as "insulting agents, when in fact these structures are actually a necessary part of the normal dental mechanism, serving a useful purpose. The practice of filing the teeth of all horses is as objectionable as to ignore the operation entirely, and tends to bring disrepute upon a very valuable surgical operation. In this simple procedure, as in any other, its proper application brings marked results, while its improper use brings naught but disappointment. And, again, reducing the borders of the molars to a smooth rounded condition by cutting and filing is distinctly harmful to any horse or ox. The grave dental disorders, such as decayed teeth, elongations that prevent perfect contact of the grinding surfaces and enamel points that wound or threaten to wound the buccal membrane, alone need attention. It is for such grave disorders the veterinary surgeon should search when seeking indications for dental surgery. Failure to make any marked or even noticeable impression in the condition of large stables of horses that are emaciated from hard service, poor feed and care, horses in poor flesh from hard work and yet having the best of food and stable attention, as well as horses in fair condition, is the basis for these conclusions.

#### ROARING FROM LARYNGEAL PARALYSIS.

After having performed many different operations for the re-

lief of this affliction during the past ten years, we are forced to admit there is no universally satisfactory surgical panacea for "roaring." The danger of making a quite useful horse useless and the great liability of recurrence of the roaring one month, three months, six months or even a year after operating, are the bans on the operation for laryngeal paralysis.

With us operations for roaring are successful only in animals above the age of ten years. The operation giving the best results is ablation of the anterior half of the left arytenoid cartilage and vocal cord. In young animals any operation that requires considerable cutting of the larynx will sooner or later prove disastrous, from constricting cicatrization of the wounded mucous membrane, distortion of the cricoid cartilage, from a general productive perichondritis, or from a combination of all three. Our advice to the veterinarian in this connection is to avoid patients under the age of nine or ten years unless they are absolutely worthless and to operate with some confidence upon the aged ones.

#### ŒSOPHAGEAL OBSTRUCTION IN THE HORSE.

For the choked horse that has failed to yield to the usual forms of palliative treatment we have recently adopted the following treatment: A stomach tube of ordinary dimensions is passed to the obstruction, after which an incision is made so as to expose the œsophagus in the middle third of the cervical region. A tape is then passed around the œsophagus and tied tight enough to prevent an upward flow of fluid into the pharynx and subsequently into the lungs. With this protection water may be freely injected into the tube to dissolve and wash away the obstructive mass. The amount of pressure produced by the injected water can be felt on the œsophagus just below the tape, so there need be no danger of rupture. The operation is recommended as a last resort for the cure of choke in the horse. Its value in the other animals has not been determined. Œsophageal obstruction in the horse is usually the result of a preexisting dilatation, the obstructing mass is oats, corn or hay, and the location is the thoracic portion of the gullet. It is therefore

evident that a probang should never be inserted for the object of forcing the mass toward the stomach, as is so frequently recommended and practiced. The palliative treatment of drenching and administration of medicines that are supposed to stimulate the oesophagus frequently fail, even after several days of diligent effort. In view of the helplessness of the surgeon at this point of the condition operative intervention is justifiable. Failures may be anticipated when the mass has become desiccated or the dilated wall has become necrotic from delaying the operation too long, but our observation to the present time warrants its recommendation in the highest terms.

#### ABDOMINAL OPERATIONS IN THE DOG.

Anatomically, the larger domestic animals are not suitable subjects for the abdominal operations which expose to view the internal organs, and it is very evident that so far as the non-ruminating herbivora is concerned such operations will be slow to gain favor. Although the indications for such operations are legion it is even feared we shall forever be denied their application. In the dog, however, we are justified in transgressing freely upon the abdominal organs, and the veterinarian, who is also a surgeon, should not overlook the possibilities in this connection. The dog with its disposition to ingest solid bodies, such as marbles, coins, balls, corks, sponges, etc., very frequently presents to the good diagnostician a very beautiful subject for an intestinal operation, and the success with which these operations are carried out by veterinarians is indeed gratifying. Laparo-hysterotomy (caesarean section) is also gaining much favor with the practitioner among dogs, not because it is being performed better, but owing to a more scrupulous consideration for the proper time to operate. The keynote of success in these operations is early intervention. Delays are dangerous. We have found that caesarean section on the non-septic uterus has a very low mortality, while in the septic cases recovery is a rare result. To resort to such operations only at the last moment, when there is no possible chance of recovery, is doing an injustice

to the procedure, but timely intervention will bring to the surgeon, as well as the profession, the applause which the successful execution of an operation, requiring accurate knowledge of modern surgery, always brings forth. The abdominal operation has been the making of human surgery, which admonition should teach the veterinarian to seek its indication in the small animal and to endeavor to overcome the obstacles preventing its application in the larger ones.

#### NEUROTOMY.

A better understanding of the distribution of the sensory nerves of the horse's extremities has been the means of adding a number of more or less valuable surgical operations to the field of veterinary surgery. Plantar neurotomy has been practiced to a limited extent for about three generations, and digital during one generation, while the others, median, ulnar, tibial and peroneal are more recent acquisitions. A lucid explanation of the proper time and opportunity to apply each of these operations would require detailed consideration of each disease they are intended to relieve, which would be impossible in a brief space. We can only hasten to reiterate what this paper has aimed to teach throughout, that scrupulous attention must be given to the selection of proper indications so far as our deficiencies in the art of diagnosis will permit. In the practice of neurotomy this warning needs special emphasis. The veterinarian who will persist in applying such operations in the absence of some degree of certainty as to the diagnosis or to the well known contra-indications will soon meet with disappointments and disasters without number. The use of each of these operations for some years has taught us the impressive lesson that conservatism is indeed a blessing in surgery, and especially in neurotomy. Recent or acute inflammations or severe lameness of a chronic character are always contra-indications for neurotomy, and the surgeon should never permit himself, under any circumstances, to yield to the desire for a hurried cure of such conditions. And, again, extensive structural changes as occur in laminitis, diffused tarsitis, ringbone and sidebone, and

osteophytes that transgress upon ginglymoid articulations without mechanically obstructing the motion are equally dangerous conditions. The true indication for neurotomy is the *trivial disease*, producing a *trivial lameness* in a horse having but a *trivial duty* to perform. This suggestion must be the basis upon which to select the indications for neurotomy, and while it may be deviated from in accordance with the surgeons' judgment of each case, the nearer one remains to the suggestion the better will be the results.

#### THE CLINICS OF THE A. V. M. A.

Being an admirer of veterinary surgery, a believer that it is a useful part of the world's knowledge, and an ever willing assistant to its advancement, I cannot refrain from taking advantage of this opportunity to condemn the surgical clinic of the American Veterinary Medical Association, chiefly because these clinics are not a fair presentation of the highest standard of American veterinary surgery. In justice to surgery, in justice to the surgeon, and in justice to the Association they should be abandoned or conducted on entirely different lines. Such amphitheatre demonstrations in the art of surgery are only of nominal value under the most favorable conditions. Here their value is nil. The very best argument in their favor is that they at least give a general impression of the operations performed. But the American Veterinary Medical Association should not stoop to dispense fundamental knowledge that should have been acquired in the early years of the college curriculum. The member of this Association who is incapable of performing this or that operation will add nothing to his deficiency by occupying a seat at these exercises. They excite the greatest curiosity, but they do not instruct the unlearned, the purpose intended of them. The A. V. M. A. is a fair representation of the American veterinarian. Its surgical clinics should therefore represent the standard of American surgery, before its stamp of approval is placed upon them. The influence of the A. V. M. A. is essential to the progress of surgery in America, but this influence must not be exerted without method or purpose as at present,

but in a manner to bring the desired results and at the same time reflect credit instead of discredit upon the surgical branch of the profession. If the A. V. M. A. is bent on satisfying the thirst for surgical knowledge by giving practical demonstrations it might do worse than leave the matter in the hands of a committee of surgeons who would be competent to decide as to their appropriate scope and character. Such a committee could be depended upon to report the year's revelations in surgery and to illustrate their report with instructive practical demonstrations that would represent the highest standard of the art of veterinary surgery as practiced on the American continent by the American veterinarian.

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THE HORSE has another enemy in Chicago. This time it is the pneumatic tube. On Aug. 25 more than 100 horses were laid off in the mail service and the mail will be sent to the various depots by the tube route.

THE LEGISLATIVE COMMITTEE of the Michigan State V. M. Association are working very intelligently and earnestly to prepare for the pushing of the proposed veterinary Sanitary law, and are already sending out literature, and urging its members to interest all legislators and would-be legislators in it—with a view to having them pledged to its support when the Legislature meets.

DR. WM. SHEPPARD, of Sheepshead Bay, N. Y., suffered a serious accident about the first of August in being kicked in the temporal region by a thoroughbred upon which he was operating. He was firing the back tendons of a front leg, when the colt kicked sideways with a hind leg, striking the doctor squarely in the temple. He was unconscious for some time, and afterwards suffered from deafness and great pain in the ears. We are glad to announce that he is making a good recovery.

DRS. V. A. MOORE and Wm. Henry Kelly, of New York, have gone to Lethbridge, Can., to study maladie du coit on behalf of the Commissioner of Agriculture. Some two hundred affected animals are to be slaughtered by the Canadian Government, and Commissioner Weiting has very wisely sent representatives of the veterinary profession there to familiarize themselves with the clinical symptoms and bacteriological characters of the disease, so that should an invasion ever occur in his commonwealth its identification could be readily accomplished.

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**"NERVOUS," "STIFF-LEGGED," OR "FAINTING"  
GOATS.**

BY DRs. GEO. R. WHITE AND JOSEPH PLASKETT, NASHVILLE, TENNESSEE.

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Several months ago, we were called to the well-known Ewell Stock Farm, Spring Hill, Maury County, Tennessee, to see the famous pacing stallion, John R. Gentry. While there, our attention was called by the proprietor, Mr. George Campbell Brown, to a peculiar breed, or species of goat, known throughout this section as "Nervous," "Stiff-legged," or "Fainting" Goats.

We had often before heard of such animals, but up to that day had considered it either a joke or superstition. However, upon this occasion we were convinced beyond the shadow of a doubt, that such goats do exist, as their owner required them to "perform" for our special benefit. They were to us very amusing as well as interesting "freaks" of goatology. So much interested were we in their behavior that Mr. Brown, upon our request, shipped to us by express a pair, in order that we might acquaint ourselves more fully with them.

These goats have been kept in a box-stall of the Nashville Veterinary Hospital for the past six months, which has afforded an excellent opportunity to observe their behavior.

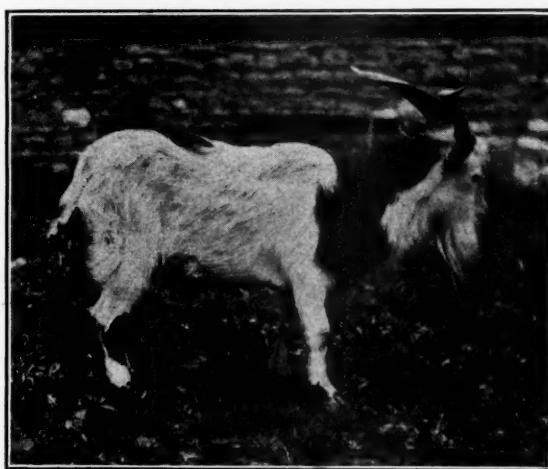
After careful observation and painstaking investigation, we are convinced that this is a new breed of goat, worthy of note in American literature. The history of this unique goat is somewhat indefinite, and as to exactly how they originated, we are not certain. However, so far as we have been able to determine, the breed was first seen in the southeastern part of Marshall County, Tennessee. At the present time there are a few of these goats distributed over Marshall, Giles, Lawrence, Maury and Coffee Counties. Mr. George Campbell Brown has a herd of thirty-five. We do not believe there are more than seventy-five or one hundred of these goats in existence at the present time.

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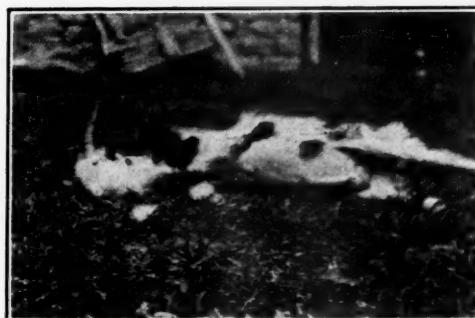
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At a casual glance under ordinary conditions they appear to be just ordinary "billies" (illustrated by photograph No. 1),



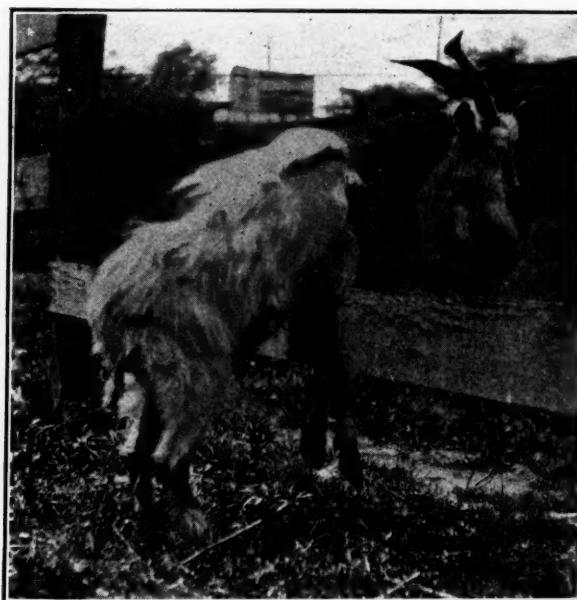
No. 1.—A typical specimen of the "Nervous," "Stiff-legged," or "Fainting" Goat, which, until frightened, appears to be just an ordinary "Billy."

but upon the least excitement the picture changes. Closer acquaintance reveals the fact that they possess a most extraordinary characteristic. They are easily frightened, and to simply "boo" at them will cause them to fall helplessly to the ground and remain there until the spell leaves them (illustrated by photograph No. 2). They scare and faint upon the slightest



No. 2.—This photograph shows the same goat after being frightened. The picture has changed and the goat lies in a state of tetanic convulsions until the spell leaves him.

provocation. The mere effect of jumping over a fence or bar over 15 or 18 inches from the ground, is sufficient to cause them to become stiff and "faint" (illustrated by photograph No. 3).



No. 3.—This photograph shows the same goat attempting to jump a bar which is only fifteen inches from the ground.

When under these spells they can be approached, turned over and dragged about just as if they were dead. They become so rigid and stiff that they can be lifted bodily without bending. So far as we have been able to determine, the animal retains full possession of its intellectual faculties throughout this peculiar manœuvre, but they have that pathognomonic expression indicative of fright, anxiety, and, we might say, agony. The symptoms simulate those of tetanus or strychnine poison. They become stiff and rigid, totter and fall to the ground in tetanic convulsions, the duration of which varies from ten to twenty seconds. At this time there is protrusion of the eyeballs, which give them a "bucking," wild, staring appearance. Associated with the above we have general rigidity of all the

voluntary muscles. Contraction of the cervical extensors causes a straightening of the head, hardness of the muscles of the neck to the touch. Upon the back, loin, and croup the muscles are as hard as wood. On account of the spasmodic contraction of the muscles of their legs, their flexion is impossible.

Dyspnoea in an aggravated form occurs; in fact, on several occasions we have noticed temporary cessation of respiration entirely, on account of intense rigidity of the abdominal and thoracic muscles, associated with fixidity of the diaphragm and spasm of the glottis. The heart muscle, although it is involuntary in character, must certainly respond in some manner to the same stimulus of excitement which affects the voluntary muscles as the pulsations during the attack are fast, hard, small and irregular. They lie on their side for fifteen or twenty seconds in a state of opisthotonus before recovering sufficiently to again rise to their feet. After getting up they stagger and walk off with their legs stiff, rigid, and spread wide apart. The gait at this time resembles that of a horse suffering with tetanus; after they have gone twenty or thirty feet the symptoms disappear, and they have the appearance of any ordinary goat, none the worse for the ordeal through which they have gone. It is said that, in rare cases these goats have been known to be frightened to death; this is very rare, however.

At this juncture we will state that a kid has been born since these goats have been under our observation, and it presented all the characteristic "nervous" and "fainting" symptoms of its parents before it was three hours old.

The histological and anatomical changes in the motor nerve centres and trunks, we are not in position to explain, as such would be impossible in the absence of an autopsy. The excitement causes overstimulation of the motor nerve tracts, which after fifteen or twenty seconds subsides into the normal condition.

The reasons for such a peculiarly high developed nervous-muscular system, we shall not attempt to explain, suffice it to say that this trait of action has become so well marked, and so

thoroughly established that we are justified in classing this animal as a new, separate and distinct breed, since uniformity has been established; the general principle that "like produces like" holds good with this breed.

It has long been an axiom that the physical as well as the mental and moral peculiarities of the father and mother, are visited upon the children of, even beyond, the third and fourth generations, so it is that this established characteristic is uniformly transmitted by heredity from the father and mother goat to their offspring.

After most diligent inquiry, we are unable to trace a single case where atavism has taken place.

The advantage of this goat over the common goat is, that it can be kept in prescribed grounds.

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THE EMPRESS OF CHINA has for the first time publicly recognized the medical work of the Protestant Missions by subscribing money for their medical college.

IN the stable trained by Scott Hudson there was at the beginning of the season a mare called Italia which showed great speed, but would jump up and run when there seemed to be no reason for it. At last a skilful veterinarian was called to examine the mare and promptly stated that her vagaries were caused by a well-defined affection of the heart. The action of the "pumping machinery" was found to be so irregular that the mare will be or has already been sent home for a long rest.

—*Breeder's Gazette.*

IN the feeding experiments conducted at Loveland, Col., jointly by the United States Department of Agriculture, the Colorado Agricultural College and the Great Western Sugar Refining Co. in feeding beet pulp to steers with and without grain, it is shown in a recent bulletin that the steers fed pulp, alfalfa and oats and barley made a net profit of \$12.55; those fed pulp, alfalfa and ground corn, a profit of \$15.45, and those fed pulp and alfalfa alone, a profit of \$16 per head. The last named drove weighed the least, sold for the least, and shrank the most, yet yielded the greatest net interest on the investment, and quite enough to prove entirely satisfactory. Their gain in gross was 284 pounds in 25 weeks, the shrink 44.1 pounds, and the price in Denver \$5.15.

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REPORTS OF CASES.

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*"Careful observation makes a skillful practitioner, but his skill dies with him. By recording his observations, he adds to the knowledge of his profession, and assists by his facts in building up the solid edifice of pathological science."*

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## DENTIGEROUS CYST.\*

By J. P. FOSTER, V. S., State Veterinarian, Huron, South Dakota.

In making a report on surgery, it has been the custom to relate some of the more recent operations as described in veterinary literature. But, as I know that a majority of the members of this association are subscribers to one or more veterinary journals, I will not at this time discuss matters already familiar to them in the records of various operations made public since our last meeting, but will confine myself to the description of a case that I consider quite interesting.

A bay mare, four years of age, of trotting breed (granddaughter of Moody, 2:18 1/2), was brought to me for treatment of a fistulous opening situated at the antero-external part of the base of the right ear. This condition had existed since the animal was a yearling and had been treated by a number of empirics in the attempt to "eat out the pipe," as one of them expressed it. The owner told me that in his opinion the trouble must have been caused by a bite from another horse. The patient from constant treatment, extending over a period of three years, had become very "touchey" about the head, and was therefore cast before much of an examination was attempted. After casting, and removing the accumulations of pus and dried exudate from the region, a probe was inserted in the fistulous opening, which was situated on a level, and about one inch in front of the inferior point of the aperture of the concha. The fistulous tract passed downward toward the squamosal bone, and at its depth the probe came in contact with a hard substance which could also be detected through the skin by manipulation, and appeared to rest upon the superior surface of the squamous temporal bone, and immediately in front of the external auditory meatus. An incision one and one-half inches in length was made downward; beginning at the fistulous opening, and extending toward the eye. Upon inserting the finger, what seemed to be the crown of a molar tooth could be plainly felt about one inch lower than the bottom of the incision.

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\*Presented at the Semi-annual Meeting of the Minnesota State Veterinary Medical Association, July 14th and 15th, 1904.

By inserting the molar extractors, closed (without handles attached), so that they would more easily pass through the small incision, and afterwards opening them and securely engaging the tooth, it was removed without great difficulty. The tooth approached cuboidal in form, measuring on an average, one inch in each direction. It weighed one-half ounce.

Its superior surface (crown) was considerably blackened. After removal, the shallow alveolus (about three-eighths of an inch in depth) could be easily felt in the squamous temporal bone. All portions of the fistulous tract were removed, the cavity cleaned out as well as possible, and the incision closed with three interrupted sutures, leaving room at bottom for drainage.



Since the operation, I have noticed the leading article in the AMERICAN VETERINARY REVIEW for June. This article, illustrated by admirable cuts, is from the pen of Prof. W. L. Williams, of the New York State Veterinary College. As near as I can determine, the case reported by Prof. Williams as "Case 6," is similar to the one which I have described; with the exception that the tooth in "Case 6" was below the level of the bone (see Plate III of Prof. Williams' article), necessitating a longer skin incision, as well as requiring the use of a bone chisel. The accompanying photo illustrates the case I have described.

## A RACHITIC TEXAS COLT.

W. G. Langley, M. D. V., of Dallas, Texas, contributes the accompanying photograph of a curiosity which has come under his observation.

He states that the animal is about eighteen months old, and is well formed, with the exception of his fore legs. The Doctor suggests that he is probably a good subject for orthopedic surgery.



## A TWO-HEADED CALF.

By H. W. BOYD, D. V. S., Nyack, N. Y.

The calf with these two heads was born on June 10th, 1904.

Two perfectly formed heads; faces at a right angle with each other, four eyes, four ears, two mouths, the lower jaws with separate joints.

The Atlas (first bone of spinal column) being abnormally large to accommodate the occipital bone, one-half being on each skull. The trachea and oesophagus, being single along the neck, divided at back of heads, one branch going to each throat. The hair is of a blue black color. Number of inches from nose to nose, 11 $\frac{5}{8}$ .



The mother of this wonderful production of nature, is a Jersey cow, six years old, this being her third calf. Mr. Philip Bardon, of Bardonia, Rockland Co., New York, raised and owns her, and she can be seen at any time at Mr. Bardon's farm.

These heads were mounted by Messrs. Potter & Lockwood, Taxidermists, Grand View, N. Y.

**ARE YOU READY FOR THE QUESTION?** Question: All in favor of attending the great surgical meeting of the New York State Veterinary Medical Society at Brooklyn on Sept. 13, 14 and 15, will signify by saying Aye! Contrary, No! The Chair decides that the ayes have it by a large majority.

## EXTRACTS FROM EXCHANGES.

## FRENCH REVIEW.

By Prof. A. LIAUTARD, M. D., V. M.

INTERESTING CASE OF CANCEROUS ABDOMINAL CRYPTORCHIDY [Prof. Coquot].—This subject was an old horse which on account of left monorchidy had been brought to the Alfort clinic and left to service of the surgical practical demonstration. When the operation was being performed the first steps were gone through without difficulty. When the internal oblique muscle was punctured seven or eight litres of reddish fluid escaped. The efferent canal was easily found, but all the pulling efforts made on it to bring the testicle out remained powerless. After twenty minutes of useless attempts, the operation was given up and the animal used for other purposes—the dissection room. When the abdominal cavity was opened the cause of the trouble was found. There was an enormous mass of peculiar shape, concealed in the folds of the omentum that covered it. This mass was firmly attached to the sublumbar region and had displaced the various segments of the intestines, which were removed with difficulty. Once they were taken off, the abdominal cavity was seen extensively filled by a voluminous tumor, attached superiorly to the lumbar region and the left lumbo-iliac aponeurosis. Attached by its anterior face to the duodenum, its posterior showed a deep furrow in which the superior half of the suspensory ligament of the testicle was attached. The efferens was in its normal position, but inserted in a neoplastic formation, isolated from the other, which was the testicle. All these tumors were bosselated, and hard to the touch. The testicle weighed nine pounds and the whole sublumbar mass forty-one pounds. The microscopic examination revealed the nature of epithelial cancer; and yet the animal had been able to work.—(Rec. de Med. Vet., Feb., 1904.)

RECOVERY OF A VOLUMINOUS CHRONIC INGUINAL HERNIA, OPERATED BY THE METHOD OF FELIZEL [Prof. Peuch].—A colt, aged 20 months, had inguinal hernia on the left side. It appeared when the animal was two months old, and nothing had been done. The tumor has gradually enlarged, and now is like a big udder, hangs down half way of the tibia. It grows larger after a meal, but, it has never given rise to colic. To be

sure of the nature of the hernia and of its character, the colt was thrown and laid on his back. The hernia was reduced entirely; the testicle, atrophied, was felt through the envelope; the two superior and inferior inguinal rings are felt dilated, but there is no adhesion on the walls of the vaginal sac; the hernia is exclusively *inguinal* and not complicated with eventration. The hernia can be operated, with chances of success. The animal is prepared by light diet for three days, cast, properly secured and anaesthetized with morphine and atropine, but this has to be followed by chloroform. The parts are thoroughly washed and disinfected, and the operation proceeds as follows: Having pulled the testicle down to the bottom of the envelopes an incision is made on its great curvature through the scrotum, dartos and cellular coat down to the fibrous coat. This is carefully opened to bring the testicle out. Then the envelopes are pushed upwards as much as possible, and the cord, covered with the cremaster and vaginal coat, is twisted on itself by 8 or 10 turns. A curved clamp, coated with sublimate, is applied on this funicular cord, as near the inferior ring as possible. The closing of the clamp is very difficult and cannot be made complete. The right testicle is then operated upon. The left is excised. It weighs only 50 grammes. Tetanic serum is injected, and in a few moments the animal gets up. There is no complication, except slight colics. On the twenty-first day after the operation the clamp dropped off. Recovery went on slowly and the hernia never returned.—(*Journ. de Med. Vet. de Zootech.*, Feb., 1904.)

**RIGHT PELVI-CRURAL HERNIA IN A STEER [L. Castagne].**—This lesion is difficult to diagnosticate and to cure, yet not impossible. May the following coöperate to better results: The steer one day, while being shod, struggled considerably. When returned home he is taken with very acute abdominal pains, which last all day and part of the following night, gradually becoming less violent and further apart. They are considered as simple ordinary colics, and receive an appropriate treatment. The next day and the following, however, the animal has not resumed its perfect health. He does not seem sick, but his nose is dry, there is no appetite, no rumination. He urinates and has rare motions of his bowels. He also exhibits some abdominal uneasiness, he raises his hind legs towards his belly, slowly, cautiously, without striking it, and then flexes his loins down as if he wanted to relieve himself of some pain or internal sensation. Towards the eighth day laxatives promote the expul-

sion of a clot of blood and mucus. The next day, the passages are to all appearances normal. This, however, is temporary; constipation returns, tympanites sets in, anorexia, no rumination, general prostration; death is approaching; the animal is killed on the thirteenth day of the disease. Lesions: All the stomachal compartments are healthy. The small intestine is highly inflamed, its contents are liquid, haemorrhagic and blackish. The large intestine has few lesions. Between the first loops of the small intestine and the large, a portion of the first is seen, which through an old narrow peritoneal laceration has entered the crural ring, pushing between the atrophied testicular cord and the external border of the pelvic floor. The hernia reaches the neck of the femur, is filled with food, adherent to the surrounding parts, highly inflamed, blackish and partly floating in a small quantity of purulent liquid. The peritoneum is livid and of bad color; the muscles decomposed. It is manifest gangrene. On account of the error of diagnosis the treatment was wrong. Those recommended are: (1) rectal taxis (Cadiot and Almy); (2) laceration through the rectum of the adhesion and return of the organ in the abdomen (Oster-tag); (3) section of the cord, through the rectum, so as to relieve the pressure of the cord (Zundel and Schmidt); (4) laparotomy and reduction of the hernia (Hermann and Strauss).—(*Revue Veter.*, March, 1904.)

SIMPLE AND PRACTICAL WAY TO MAKE A COW GET UP [*L. Labat*].—During labor, the various presentations of the foetus demand of the veterinarian peculiar manipulations and efforts, which may be very difficult and even impossible if the cow persists to remain lying down. To decide her to rise, the following is recommended as always successful: Have a shepherd dog or any other held by the collar, brought near the cow, towards her head. And immediately she will struggle, bend her head down and in the attempt she will make to go for the dog she will raise her hind quarters and stand up. The operator then must act quickly or renew the experiment, if necessary.—(*Progrès Vet.*, March 20, 1904.)

SUBCUTANEOUS ANGIOMA CAVERNOSUM IN A DOG [*Mr. Suffran*].—Frequently observed in man, these tumors are rather rare in our domestic animals. Only a few cases are on record, one by Prof. Laulainé, who found it attached at the omentum; another by Trasbot, who saw it in the liver of a horse; a third by Prof. Montané, who met them in the endocardium of a horse; a fourth by Prof. Cadéac, who extirpated one

near the elbow joint. There are only two cases of subcutaneous angioma in dogs, one by Siedamgrotzky, who found one in the right inguinal region; the other by Lucet on the middle of the left shoulder. In the case of Mr. Suffran the tumor was situated on the back; it had existed for two months, had grown slowly, was free from adhesion, soft and painless. It looked like a cyst or a myxoma. Extirpation was indicated and carried out with antiseptic cares, by an easy enucleation. Recovery was rapid. Under the microscope the nature of the tumor was established. Sections of the growth showed that it was made of a fibrous network of fine intersections which formed alveolar spaces having all the characters of vascular cavities. The walls of these were lined with endothelium, and their cavities filled with red corpuscles, with here and there a few white ones.—(*Revue Veterinaire*, April, 1904.)

INTRATHORACIC FIBRO-SARCOMATOUS TUMOR COMPLICATED WITH OESOPHAGEAL ECTASY AND PLEURO-PNEUMONIA—DEATH [L. Magnin].—An army mare, aged eight years. When she entered the service she had a small wart on the left fore fetlock, and for five years was under treatment at various times. In October, 1902, she did her duties up to the 27th, when she entered the hospital for what was considered an oesophageal obstruction, due to unknown causes. After a few days she was all right. She was taken again five days later, when, besides the symptoms relating to the oesophagus, she showed manifestations of pleurisy. She was placed under treatment for this trouble; seemed to improve, but the symptoms of the oesophagus became more severe, until finally the animal died. At the post-mortem was found in the antero-superior part of the right pleural sac, a very large tumor, irregular, bosselated, which, moulded on the right costo-vertebral groove by its superior border, rests by its inferior extremity on the sternum. It was adherent to the lung, the costal pleura and also to the oesophagus and trachea, upon which it pressed at their entrance into the chest. The oesophagus was filled with food from the point of pressure to its anterior orifice. It was as big as a large bologna sausage. There were two litres of yellow reddish liquid in the chest. The pleura were inflamed and both lungs hepaticized in their antero-inferior part, the right being gangrenous. The middle part of the spleen was occupied by a tumor almost spherical, of the same apparent structure as that of the chest. Both had all the characters of fibro-sarcoma.—(*Rec. de Med. Vet.*, Apr. 15, 1904.)

THE PROGNOSIS IN COMPLETE FRACTURE OF THE RIBS, WITHOUT DISPLACEMENT [*F. Breton and G. Roussel*].—A Percheron mare, seven years, is hurt by a tramway. She has a deep wound of the right gluteal region, a few bruises on the legs, and a swelling on a level with the 7th and 8th left ribs. A complete fracture without displacement of the 8th rib is evident. General condition good, no trouble of auscultation. The wound of the gluteal region is dressed, and to immobilize the fracture a blister is applied. The next day the thermometer rises one degree; after that everything is normal. The veterinarian of the parties responsible calls three weeks later, and prognosticates a possible and probable recovery. December 1st, about four weeks after the accident, the mare takes walking exercise, and in coming home is suddenly taken with convulsive shaking, repeated gaping, deep dyspnoea, suddenly drops down and dies in a few minutes. Post-mortem—Lungs slightly collapsed, with manifest evidence of asphyxia. On a level with the middle third of the left lung there is a laceration of the parenchyma of the organ, which is hanging to a fibrous band attached by one of its extremities to the parietal pleura and by the other to the lung tissue. The rupture of this, besides tearing with it the pulmonary tissue, was the cause of the haemopneumothorax, which kills the mare. Prognosis of fracture of the ribs must always be guarded.—(*Rec. de Med. Vet., April 15, 1904.*)

#### BELGIAN REVIEW.

By Prof. A. LIAUTARD, M. D., V. M.

PATHOGENY AND TREATMENT OF PARTURIENT FEVER [*Mr. Hebbelynck*].—Until lately the pathogeny of this affection has been rather mysterious, and many different theories have been advanced as to its nature. Generally the uterus has called the attention, and a sympathy has been established between the general organs and the disease. For others, the phenomena of anaemia or hyperthermia of the brain were due to abnormal irritability of the uterine nerves; and, again, for others, it was the udder which might be the centre of the origin of the trouble. Prof. Gratia considers it as the consequence of the transformation of the glandular cells into colostrum. The author gives the following definition of the disease: An infection of the mammary gland at the time of parturition; it is manifested by paralytic troubles of the whole striated and

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unstriated muscular system ; troubles which are the consequence of the resorption of toxines, from an anærobic specific agent, developing in the colostral sac of the organ. This opinion rests on the following observations : The disease assumes a certain degree of contagiosity ; there is a certain correlation between a bad hygienic condition and the appearance of the disease ; dirty condition of the barns and want of ventilation, promoting the pullulation of the germs. The various treatments recommended justify this theory—iodide of potassium neutralizes the toxic elements which are formed and destroys the germs which cause them. A solution, slightly antiseptic, of boric acid or bicarbonate of soda gives the same results. Air inflated in the udder has a double action ; while it dilates the lactiferous canals, it kills anærobic microbes, and instantaneously destroys the secreted toxines. The author considers instantaneous oxygenation in the most minute canaliculæ of the organ as the ideal treatment. Accordingly, he first injects a solution of oxygenated water, which he follows with insufflation of air. This treatment has given him 100 recoveries out of 100 cases. The complications of the disease are gangrenous pneumonia, gangrene of one extremity, and relapse, due to the presence of germs which have escaped the action of the medical agents.—(*Annales de Bruxelles*, January, 1904.)

RARE CAUSE OF ROARING IN A PIG [Mr. Lienard, Veterinary Student].—Among the swine affections where roaring can be observed, stands the "snorting disease," which by recent researches is said to be contagious, and for others is only a manifestation of rickets, osteomalacia, or osteitis. In this disease there is always swelling of the bones of the face and roaring as a consequence. The pig, subject of this report, had none of these diseases, and yet roars loud in inspiration and expiration. In closing both nostrils, the noise disappears, the animal breathes through the mouth. In closing one or the other of the nostrils, the noise is present with the same strength. The index finger introduced in either nasal cavity as far as possible reveals nothing, and is done without difficulty. At any rate, the animal is placed under observation. After three months other symptoms appear ; perhaps by intermittence the noise is less loud, but the joints become swollen, the animal keeps lying down, refuses his food ; he is slaughtered. In the left nasal cavity, near the snout, five or six little splinters of bone are found ; they are sharp, blackish, and very irregular ; the septum nasi is perforated through, by a hole 10 centimetres square, with regular cica-

trized borders. There were lesions of broncho-pneumonia, pericardial adhesions between the coats, ulcerations of the intestinal track, etc. Roaring was due to the splinters of bone, which probably by violent regurgitation had pressed into the nasopharyngeal space and then into the nasal cavities, instead of coming out through the mouth.—(*Annales de Bruxelles, March, 1904.*]

AN EPIZOÖTY OF SARCOPTIC MANGE IN PIGS [*A. Scholl*].—During 1901 the author had been called to attend to one of the animals of the place, when he noticed that many were scratching more or less. At first he paid little attention to this observation, but in subsequent visits, he made the same remark and finally was asked to examine the stock, in which accidents of peculiar nature had been observed—such as poor condition of the young pigs, a sickly appearance which sometimes carried them to a state of marasmus, ending in death. The examination was conclusive. A sow which had been imported five or six years previous was found with almost the entire body covered with crusts, redness, excoriation, etc., and within the ear a blackish brown secretion. In the crusts and in the examination of the secretion of the ear, *Sarcoptes scabei* of the *scies* variety were detected. The same condition existing in the majority of the stock (that is, 160 animals), the question was important. Two indications were present—treatment of the animals and thorough disinfection of the barns. The second indication was carried out in one of the barns, the bedding burnt, the ground floor, the walls and mangers were scrubbed with soda, and sprinkled with a solution of sulphate of copper, and a coat of whitewash applied. The treatment of the animals consisted in washing, after a thorough scrubbing with soap and water, with a solution of sulphuret of potassium (1 kilog. for 30 litres of water), and then another friction with soap and water. In a few, where the lesions were particularly extensive, the ointment of Helmerich was resorted to. The animals were then placed in the disinfected barn. For security the same treatment was renewed two weeks later. That was the last of it. During the epizoöty, three cases of transmission to man were observed. In one it lasted two months. In another recovery came rapidly. In the third the disease lasted three months. In inquiring how the disease had been introduced, it was found that in 1895, six years previous, two sows of Yorkshire breed had been bought, and that when they came to the place they already had slight redness of the skin and scratched more or less. The disease pro-

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gressed slowly, and it was observed that the pigs which were the most affected were those which stood nearest to these two sows.—(*Annales de Med. Vet.*, May, 1904.)

ERRONEOUS DIAGNOSIS OF TUBERCULOSIS IN A COW—ORDINARY INFECTIOUS LYMPHADENITIS [*Prof. Lienaux*].—The animal had been ailing since her last delivery, and has had some purulent discharge from the vulva. Her temperature varies between  $39^{\circ}$  and  $40^{\circ}$ , appetite capricious, respiration accelerated, heavy; cough irregular; percussion gives exaggerated resonance; auscultation reveals râles behind the shoulders; one left retropharyngeal lymphatic gland is tumefied and indurated; it is as big as an egg and painless to pressure. Examination by vagina reveals nothing. The hand in the rectum discovers a marked tumefaction of the sublumbar lymphatic glands; which are as big as the fist; they are hard and not painful. The udder is healthy and gives but little milk. Tuberculin used gives only  $0.6^{\circ}$  of reaction, but this may be due to the emaciated condition of the animal. However, in the presence of the signs presented by the respiratory apparatus, and with the condition of the two lymphatic glands, a diagnosis of tuberculosis was made. When the animal was killed for surgical exercise no tuberculous lesion could be found in the lungs; they were only the seat of extensive emphysema with the anterior lobes hepatized and showing all the lesions of verminiform bronchitis, with numerous nematods in the bronchia and trachea. All the other organs were free from tuberculosis. The two lymphatic glands whose hypertrophied and indurated condition had suggested the diagnosis of tuberculosis, only presented the lesions of a simple septicæmic nature; that of the guttural region contained many haemorrhagic centres of various sizes; the other was swollen and its rosy structure seemed simply hypertrophied. In concluding the report, the author points out the importance there is in appreciating with great care the nature of adenitis, which in this case have had an influence on the erroneous diagnosis.—(*Annales de Med. Vet.*, June, 1904.)

#### GERMAN REVIEW.

By ADOLPH EICHHORN, D. V. S., Bureau of Animal Industry, Ellis, Kansas.

THE TREATMENT OF HÆMOGLOBINURIA IN CATTLE [*Evers*].—Kossel and Schutz found the true cause of hæmo-

globinuria among German cattle. The practical importance of their experiments manifests itself chiefly in the successful immunization of the cattle against the disease. Five cms. of defibrinated blood, from artificially infected animals 50 days after their recovery, is injected subcutaneously; they contract a slight affection, after which they will prove immuned for a period of at least a year. While it was thought the cause of hæmoglobinuria was due to poisonous effects of certain plants, the treatment was chiefly symptomatic. According to the recent experiments the protozoön causing the disease can be found outside of the blood, in the marrow of the bones, the spleen and in the liver—that is, in the organs which take the principal part in the formation of the red blood corpuscles. During the course of the disease a large number of red blood corpuscles are destroyed, so that they are incapable of carrying the hæmoglobin in the stroma. But the blood producing organs, with their increased activity, aim to make up this loss; in the marrow of the bones, large numbers of megaloblasts can be found, but which are unable to produce hæmoglobin. This suggested to Evers the idea to introduce hæmoglobin artificially into the system through subcutaneous injections. In 1903 he applied this method in 43 cases and of these 40 recovered. Merck's hæmoglobin is produced from the blood of different animals, but chiefly from the blood of horses. It forms a brown powder, which is soluble in water, in a 0.6 per cent. salt solution in proportion of 1:20; it can be preserved in a cool place for two weeks, while in room temperature it decomposes in 1 to 2 days. E. injected subcutaneously 15 to 20 gm. of hæmoglobin in 250.0 gm. of physiological salt solution. The solution is remarkably quickly absorbed; 10 to 12 hours from the time of the injection all the swelling disappears. By this treatment the animals recovered in 3 to 5 days to such an extent that they could have been driven to pasture.—(*Berliner Thierarzt. Wochensch.*)

TALLIANINE [*C. Augerstein*].—The author applied the ozonized terpin, called Tallianine, manufactured by Brigonnet Pére et Fils and Gaubert, in the following cases, and, considering the good results he obtained, he warmly recommends the preparation: (1) An eight-year-old chestnut gelding suffered for 48 hours with laminitis. The condition gradually grew worse, so that the animal remained lying down constantly, and could only rise with assistance; 10 cms. of Tallianine were injected subcutaneously. Only with great difficulty was the

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horse kept up during the injection, lying down again soon after the operation. One hour later the animal arose without assistance, placing more weight on the front legs. After the second injection of 10 cms. Tallianine all the lameness disappeared. (2) A twelve-year-old brown gelding, affected with laminitis, received 10 cms. Tallianine injected; considerable improvement was soon noticeable. After-treatment consisted of packing the hoof with a mixture of clay and vinegar. (3) An eighteen-year-old mare affected with laminitis in all four legs. The animal was very stiff, lying down a great deal, and arose only with difficulty. Four hours after the appearance of the symptoms, the animal received 0.6 gm. pilocarpine subcutaneously, which caused restlessness, profuse perspiration, salivation, etc. As for twelve hours after the injection there was no improvement noticeable, 10 cms. of Tallianine were injected intravenously; 24 hours after this injection the animal showed only slight lameness. (4) A ten-year-old brown gelding was for three days affected with lymphangitis on the right hind leg; 10 cms. Tallianine were injected intravenously, and ichthyoil ointment was applied externally; marked improvement after two days, and in two more days the animal was placed in service. (5) A four-months-old foal affected with a bad case of enteritis, watery fetid diarrhoea, rectal temperature  $40.2^{\circ}$  C. Prognosis: *Exitus letalis*. As experiment, 10 cms. of Tallianine were injected intravenously, and Tannoform was given internally. The animal died eight hours after the injection. (8) Several young foals showed severe affections of distemper, with a bronchial affection: temperatures from 39.1 to 40.1, appetite depraved, insensibility, the animals lying down a great deal. Every foal received in two successive days 7.5 cms. of Tallianine intravenously. The temperature dropped to normal; they regained normal sensibility, the swellings of the intermaxillary lymph glands disappeared. (9) A cow affected for six hours with parturient paresis was treated with Evers' air infusion. The condition of the animal was very serious, lying in comatose condition, with a very low rectal temperature. As experiment the author injected 10 cms. Tallianine intravenously, with the result that one hour after the injection the animal arose.—(*Berliner Thierarzt. Wochenschr.*)

TUBERCULOSIS OF MEN AND CATTLE [Olof Stenstroens].—Prof. Svenson with the author infected eight calves, with the sputum of phthisic patients. Three of these calves died, and the others were killed six months after the beginning of the ex-

periments. The autopsy revealed in three calves, contrary to the results reported by Koch, a severe tubercular infection, showing the internal organs and their lymph glands affected, also spreading over the serous membranes. The author states that cattle can be easily infected with human tuberculosis, but that the virulence of the human bacilli for cattle is relatively slighter.—(*Zeitschr. f. Thiermed.*)

ACTINOMYCOSIS IN THE DOG [*L. Bahr*].—In a prize crowned work, the author describes actinomycosis of the dog, in its relation to clinical, pathological, anatomical and morphological appearance. The principal results of B.'s experiments are the following: (1) Actinomycosis appears in dogs. (2) Actinomycosis in dogs may appear in the form of tumors, abscesses, or chronic fistular processes, and is often accompanied by pleuritis or peritonitis. (3) It is possible that several different species of actinomyces take part in producing actinomycosis in dogs.—(*Maanedskrift f. Dyrlaeger.*)

AN EXPLANATION OF SOME MARVELLOUS CURES.—Remarkable testimony has been obtained by the post office department as to the ways in which testimonials are obtained by some of the big concerns engaged in this business. One large firm admitted that it had agents out seeking persons who had formerly occupied prominent positions in the community, but had suffered financial reverses and were harassed by debts they were unable to settle. The agents would obtain possession of the unpaid accounts, and would then apply pressure to the unfortunate victims, demanding immediate payment in full. Finally, after long persecution, the victim would be commanded to call at the office of an attorney, where he would be given to understand that if he would sign and swear to a testimonial a receipt in full for the claims against him would be given. This seems incredible, but the facts are now on file in the records of the post office.

MORTIMER LEVERING who has just returned from Colorado where he went to join Secretary Wilson, Dr. Salmon and Prof. Carlyle on a tour of inspection of several ranches, is quoted as saying the Government is about to establish a farm for breeding carriage horses, near Fort Collins. An appropriation of \$25,000 has been made for this purpose. The officials are said to believe that horses of better endurance can be bred in the West than anywhere else.

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## ARMY VETERINARY DEPARTMENT.

DR. GLASSON AND THE "CURE" OF GLANDERS BY MALLEIN.

FORT ASSINNIBOINE, MONT., Sept. 12, 1904.

*Editor's American Veterinary Review:*

DEAR SIRS:—In the Army Veterinary Department of the last issue of the REVIEW appears a letter from Dr. S. Glasson, 9th Cavalry, in which he proclaims his disbelief in the "cure" of glanders by mallein, describing a case which resulted in failure.

It would be fruitless to attempt to explain to the Doctor wherein he has erred, as he has evidently gone astray on his own volition in the application of mallein, and as he has entirely misconstrued the tenor and object of my concise statistical report and the conclusions drawn from it. Moreover, he has not told us how he has performed these repeated "inoculations" of mallein, and I seriously doubt that he is able to perform them correctly.

To substantiate my doubt, it is necessary to state that I have seen him assisting in a mallein-test in 1900 at the camps in San Francisco. To his credit it may be said that he was not responsible for this outrageous performance. It consisted in driving unbroken remount-horses into chutes, similar to those in the slaughter-pens, in which they were scared into frantic efforts to retain their equilibrium and regain their liberty, and vigorously objecting to the impudence of having a thermometer forcibly introduced into the rectum from a safe place at the top of the fence. I objected at the time to such Wild-West-Circus performance, pointing out that under such inhumane restraint and hideous noise a perfectly healthy horse may run up his temperature a degree or two, and that it was totally unjustified to condemn and destroy horses under such circumstances, merely on a rise of temperature. But a civilian "Chief-veterinarian" and his "students" were engaged for this work, and there was no army veterinarian with authority to stop it. Dr. Gelston, who assisted in testing the remounts of our regiment, soon permitted himself to be persuaded to make the injections and temperature tests under ordinary restraints, and the reactions in our lot of horses at once became so few in comparison to those of the other lot as to be most pointing.

This was only an ordinary mallein-test to ascertain the extent of infection. What about the "repeated applications of

mallein," which entail such a great amount of careful, pains-taking work, and of minute observation and considerate conclusion? I for one don't believe at all that Dr. Glasson succeeded "*in one particular case in allaying all the objective symptoms of glanders; that the characteristic nasal discharge ceased; that the ulcers disappeared from the Schneiderian membrane; etc.*" Heaven only knows what that case was!

With such exclamation rather than explanation, I beg to be excused from further comment. There is no "cure" for glanders by mallein, nor by any other means of which we know at present, if a case has once developed to such an extent as to be discernable by ocular examination. OLOF SCHWARZKOPF.

THAT WONDERFUL HORSE.—*Berlin, Aug. 13.*—Wilhelm von Osten, who has for a long time made investigations of the intelligence of animals, has reached results in educating an Orloff stallion that causes amazement among scientific men and psychologists. Some of those who have tested the mental powers of the animal are Dr. Studt, the Prussian Minister of Education; Professor George Schweinfurther, the famous American traveler; Professor Karl Stumpf of the Berlin University; Professor Schillings, the naturalist, and Ludwig Heck, Director of the Berlin Zoölogical Garden. The horse, besides adding, subtracting, multiplying and dividing sums, does complicated examples in mathematics, finds square numbers, and does not simply repeat what is taught, but solves fresh problems put to him by examiners in the absence of his master. The stallion also forms little sentences, remembers them next day and discriminates 12 colors and shades, giving their corresponding names. The animal distinguishes musical tones, indicating where they are situated on the chromatic scale, and picks out discords, designating which tone to omit in order to restore harmony. The horse communicates by a system of hoof beats representing the alphabet. Professor Schillings has taken much interest in displaying the horse's accomplishments to other scientists. Dr. Studt says Herr von Osten would be burned as a wizard in the earlier ages of the world. When the exercises are prolonged the horse becomes nervous and inattentive and mistakes become very frequent. Professor von Osten affirms that the horse is as well educated as a boy who has gone to school for the same number of years, and the Professor desires that a commission of specialists be selected to take the horse under conservation for four weeks.—(*Associated Press Dispatch.*)

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## BIBLIOGRAPHY.

**HANDBOOK OF MEAT INSPECTION.** By Robert Ostertag, Professor in the Veterinary High School at Berlin. With 260 Illustrations and one colored plate. Authorized translation by Early Vernon Wilcox, A. M., Ph. D., Veterinary Editor Experiment Station Record, with an Introduction by John R. Mohler, A. M., V. M. D., Chief of Pathological Division United States Bureau of Animal Industry. New York : Wm. R. Jenkins, 851-853 Sixth Avenue.

While manuals of meat inspection have been translated and published in this country from the German, no such extensive treatise as Ostertag's standard work has hitherto been attempted. It is a very exhaustive and complete work, not only upon the abstract subject of meat inspection, but it goes deeply into a consideration of every phase and ramification of the subject. In so far as diseases which affect the wholesomeness of meat are concerned, it is a better treatise upon pathology than most of the works devoted to that specialty ; in fact, there is more practical information upon the pathology of diseases falling within its scope than can be found in any work in the English language. In view of the commanding position which the subject has assumed in the United States, this work of Ostertag's, with its valuable addition by Mohler, who has presented the history and operation of meat inspection in this country, as exemplified by the Bureau of Animal Industry, should surely take its place as the standard text-book and book of reference. We doubt if Ostertag's work would have been so acceptable to the profession of America without Dr. Mohler's splendid prefix, which gives a concise but thorough statement of the present status of meat inspection in this country. The body of the work is divided into seventeen sections, and a reproduction of the headings in the "Index" will give the reader some idea of the scope of the work. Section I, general discussion of meat inspection ; II, Imperial legal foundation for the regulation of the meat traffic ; III, the art of butchering, including the inspection of animals before slaughtering ; IV, inspection of slaughtered animals ; V, normal appearance and differentiation of meat and organs of different animals ; VI, abnormal physiological conditions which possess sanitary interest ; VII, general pathology of food animals from the standpoint of sanitary police ; VIII, especially noteworthy organic diseases ; IX, anomalies of the blood ; X, poisoning (intoxications), effect of odorific drugs and so-called auto-intoxications ; XI, animal parasites (invasion diseases) ; XII, plant parasites (infectious diseases) ; XIII, emer-

gency slaughter on account of serious infectious diseases and meat poisoning—defective bleeding—natural death; XIV, post-mortem alterations in meat; XV, the addition of flour to sausages—coloring and inflation of meat; XVI, preservation of meat; XVII, boiling, steam sterilization and harmless disposal of meat.

Dr. Wilcox is deserving of the thanks of the profession for the excellent manner in which he has accomplished a very arduous and gigantic undertaking, for the careful and minute manner in which he has followed the German text, and for his evident desire to overcome the objection to many translations from the Teutonic tongue in the avoidance of a jumbling of English and German technicalities, making it difficult to intelligently follow the author save by the employment of a lexicon. The illustrations are very helpful to the descriptions, while their explanatory notes make the figures clear and easily understood.

Jenkins has done full justice to this important work, employing a splendid, highly-calendered white paper, a plain large type for the text and subheadings.

There can be little doubt but that the publisher and author will be well repaid by a large sale of the book.

**EXAMINATION FOR MEAT INSPECTORS, BUREAU OF ANIMAL INDUSTRY.**—The following circular of information explains itself: “The United States Civil Service Commission invites special attention to an examination to be held on September 14, 1904, at the places mentioned in the accompanying list, to secure eligibles from which to make certification to fill several vacancies in the position of meat inspector in the Bureau of Animal Industry, Department of Agriculture, and other similar vacancies as they may occur in that Department. All the eligibles secured from the April 19, 1904, examination have been appointed; and in view of the fact that the Commission has been unable for the past three years to at any time supply the needs of the Department, qualified persons are urged to enter this examination. The examination will consist of the subjects mentioned below, weighted as indicated: 1. Spelling (twenty words of average difficulty in common use), 5; 2. Arithmetic (simple tests in addition, subtraction, multiplication, and division of whole numbers, and in common and decimal fractions, and United States money), 5; 3. Letter-writing (a letter of not less than 125 words on some subject of general interest. Competitors will be permitted to select one of two subjects given), 5;

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4. Penmanship (the handwriting of the competitor in the subject of copying from plain copy will be considered with special reference to the elements of legibility, rapidity, neatness, general appearance, etc), 5; 5. Copying from plain copy (a simple test in copying accurately a few printed lines in the competitor's handwriting), 5; 6. Veterinary anatomy and physiology, 15; 7. Veterinary pathology and meat inspection, 30; 8. Theory and practice of veterinary medicine, 30; total, 100. The last three subjects include general questions on anatomy and physiology, a consideration of the pathology of diseases in general, and such special pathology as is characteristic in the diseases common to food-producing animals. The symptoms, diagnosis, and treatment of diseases incident to domesticated animals will be considered, also the laws and rules promulgated for the regulated inspection of meats. Seven hours will be allowed for this examination. Age limit, 20 years or over. Applicants must be graduates of veterinary colleges. Those graduating prior to or during 1897 will be admitted if from colleges having a course of not less than two years in veterinary science; applicants graduating since that time must be from colleges having a course of not less than three years and have spent at least two years in the study of veterinary science in such colleges. These facts must be shown in the application. This examination is open to all citizens of the United States who comply with the requirements. Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the Secretary of the board of examiners at the places mentioned in the accompanying list, for application Form 1312. No application will be accepted unless properly executed and filed with the Commission at Washington. In applying for this examination the exact title as given at the head of this announcement should be used in the application. As examination papers are shipped direct from the Commission to the places of examination, it is necessary that applications be received in ample time to arrange for the examination desired at the place indicated by the applicant. The Commission will therefore arrange to examine any applicant whose application is received in time to permit the shipment of the necessary papers."

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JOKES—"There goes a doctor not one of whose patients has ever complained of his treatment." Pokes—"How is that?" Jokes—"He is a veterinarian."

## CORRESPONDENCE.

## DR. HALLORAN'S OBSTETRICAL CASE.

WASHINGTON, C. H., OHIO, Aug. 8, 1904.

*Editors American Veterinary Review:*

DEAR SIRS:—In reference to Dr. Halloran's "rare obstetrical case," page 459, August REVIEW, and his final query at close of description of case, we would call his attention to Vol. XII, page 173, of the AMERICAN VETERINARY REVIEW, only asking him to remember that "three" on second line should be "five."

Yours, WM. H. GRIBBLE.

## DR. KAUPP EXPLAINS SOME ITEMS CONCERNING THE RECENT MEETING OF THE MISSOURI VALLEY ASSOCIATION.

KANSAS CITY, Aug. 8, 1904.

*Editors American Veterinary Review:*

DEAR SIRS:—REVIEW received to-day, and found it filled to repletion with good things.

I wish to correct an error, in the report of the meeting of the Missouri Valley Association on page 491. The directions to Dr. W. C. Langdon's prescription should have read *per orum*, instead of introduced into uterus in one gallon of water. The prescription to be so injected is as follows:

R. Tannic acid,  
Boric acid,  
Zinc sulph.,  $\frac{aa}{3}$  iij  
Hydrastin,  
Morph. sulph.,  $\frac{aa}{3}$  ss  
Aq., q. s. *ad.* qt. j  
M. S. Two ounces in one gallon of water injected into uterus once daily.

Perhaps it would be interesting to those who saw this case to know that she has made a complete recovery and has sold for \$3500, double what she had sold for while affected by leucorrhœa.

Sincerely yours, B. F. KAUPP.

WEANLING MULES have been contracted of late in the Louisville district of Kentucky for November delivery at as high as \$90 per head.

DR. B. K. Dow, Secretary of the Connecticut Veterinary Medical Association, writes that the profession in that State is enthusiastic regarding the attempt to be made at the next session of the Legislature to secure the passage of a bill to regulate the practice of veterinary medicine.

## OBITUARY.

### PROFESSOR JAMES BEART SIMONDS.

This distinguished veterinarian, formerly principal of the Royal Veterinary College, London, England, died on August 5, at his residence, St. John's Villa, Ryde, Isle of Wight, in his ninety-fifth year. He had been the holder of many important positions in connection with veterinary science, and we are indebted to the *Veterinary News and Bulletin* for the following sketch of his professional career: Aside from his principalship alluded to above, he was professor of cattle pathology in the Royal College. For many years he was the regular professional adviser to the Privy Council in all matters pertaining to the regulation and supervision of the cattle trade, and in this capacity was sent by the Government, in 1853, as a Commissioner to the Continent to inquire into and report upon the alleged discovery of an effective means of preventing the disease of pleuro-pneumonia in cattle. Four years later he was again commissioned to visit the continent, this time Poland and the Danubian provinces, for the purpose of observing the course of the cattle plague which was then raging there.

### LEOPOLD TRASBOT.

Word has just been received of the recent death of Leopold Trasbot, honorary director of Alfort, France. It is likely that Prof. Liautard will furnish a sketch of his life and work in behalf of veterinary science in one of his early chronicles.

**ART AS IT IS CRITICISED.**—Jesse Lewisohn is a collector of pictures. The other day he was conversing with Robert Henri, the painter. "Art galleries and exhibitions," Mr. Lewisohn said, "are interesting places to haunt. I wish I had noted down all the old comments I have heard in them. Only last week I stood behind two young women from the country in a picture shop. One of them called the other's attention to an atrocious animal piece. 'Two Dogs; After Landseer,' she read from the frame. 'I can see the two dogs, but where is Landseer?' The other young woman studied the painting closely. 'Where is he?' she asked. 'I guess this must be one of them puzzle pictures.'"

## SOCIETY MEETINGS.

### AMERICAN VETERINARY MEDICAL ASSOCIATION.

The 41st annual meeting was called to order in Trimp's Hall, Easton and Grand Avenues, St. Louis, Mo., Tuesday, Aug. 16, at 10 A. M., by President Roscoe R. Bell, at which time the hall was already well filled with members, visiting veterinarians and ladies. The President referred to the cordial and very general invitations from the profession of the City and State, the World's Fair authorities, business organizations, etc., which had brought the Association to St. Louis, and then introduced Mr. Henry H. Wernse, President of the Mercantile Exchange, who on behalf of the Mayor and the organization over which he presides, extended the heartiest of welcomes to the visiting veterinarians. For the Association Dr. W. H. Dalrymple, of Louisiana, responded in well-chosen words, intimating that it might be considered that the present meeting of the American Veterinary Medical Association was a part of the great World's Exhibition, since it was a display of the wonderful progress being made in this branch of medical science, showing as large and intelligent a body of men as can be gathered by any scientific organization. He assured the host of the sincere appreciation which the Association felt in the cordiality of the welcome extended to it.

President Bell then delivered his annual address as follows:

#### PRESIDENT'S ADDRESS.

*"Fellow-Members of the American Veterinary Medical Association:*

"I have the great honor to offer to this large assemblage of members and guests the usual annual address of the Presidential office; and, while a study of those of my distinguished predecessors has shown the greatest diversity in their estimates of the character which such a paper should have, and what subjects should be treated, it is apparent that they consisted largely of themes which were uppermost in the minds of the profession at the time. The many problems which confront the profession to-day make the task of considering them in an address of this kind rather a difficult one, when it is desired to maintain its length in harmony with the splendid programme which has been prepared by the combined efforts of our members and invited guests.

" I shall therefore curtail any prefatory remarks which otherwise I might be glad to indulge in, and at once make such suggestions to the Association which a careful study of existing conditions has led me to believe are pertinent—not so much for any conclusions that I have reached, but rather that I may through this opportunity give prominence to subjects which seemed to be pressing for your earnest consideration.

" From the peculiar advantages for observation which I possess, and the opportunities I have for keeping in touch with the members of the veterinary profession throughout the country, I have been enabled to learn much of the condition of the practitioners from a practical standpoint; and it is a safe assertion to make that, as a whole, they are enjoying a more liberal patronage than they have ever received. This is particularly gratifying, since it is not the result of 'boom times,' but it is principally due to two factors: The chief of these is the quality of the practitioner himself, which has inspired the owner of live-stock with greater confidence in his ability to render valuable services, not only in the treatment of the diseases from which animals suffer, but the advice of the veterinarian of the modern school is sought upon questions of sanitation, particularly for the eradication and prevention of those animal scourges which destroy the herds and flocks of live-stock breeders and owners. This is not merely an indulgence in meaningless platitudes; but from observation, extensive reading of contemporaneous literature, interviews and correspondence, it is made evident that the educated veterinarian of character and capacity is receiving as he is deserving of the patronage and confidence of those whom he is so well fitted to serve. Through his exclusive knowledge of the many sanitary, economic and purely medical problems that confront the owners of live stock he is their logical and their only safe advisor. The second factor operating in favor of the satisfactory state of veterinary practice is the esteem in which his chief patient, the horse, is held in all localities. Although the past few years have witnessed the extensive introduction of all manner of horseless vehicles for pleasure and profit; although more dollars have been thrown behind enterprises intended to popularize the motor carriage than were ever invested in one direction in the history of the world; although newspapers subsidized by stock in such companies, or edited by faddists whose visionary powers are so obtuse that they can only see in one direction, have prophesied the extinction of the horse with a precision worthy of better judgment—I say, notwithstanding

standing onslaughts of all characters, the horse has steadily increased in numbers, in utility, in price, in esteem, and has made for himself a stronger and more enduring place than he has ever occupied. His test in competition with the inventions of man has been so much to his advantage that his wonderful capacities and nobility of character have established themselves more firmly than could have been accomplished by any other means.

"Although we look with complacent pride upon what we are pleased to designate 'the modern veterinarian,' we should not be allured into a belief that the veterinarian of to-day is in possession of the amount of education which is available nor the quantity and quality which he should possess. It is very true that some veterinarians who received their degrees from schools where the term was short and where the instructors were men of limited capacity, have made intellectual giants of themselves. Upon a meagre foundation their natural bent for study and investigation, and often their practical tendency in that direction have enabled them to acquire later in life what was denied them in their college days. Instances without end could be cited where men with almost every obstacle in their way save ambition and determination have risen to the highest positions in every field of human endeavor—whether it be in the arts and sciences, in statecraft, in commerce, in the victories of peace or the strife of wars. But where one conspicuous figure can be pointed to as an example of self-development, it is a struggle which the vast majority of men are unequal to. From what we know of the illimitable knowledge in medical science which may be acquired by the mind of man when properly trained and vigorously applied, it is not hard to appreciate the limited requirements of the average mind where opportunities have been denied it—either through lack of facilities or application, or both. Such then were the opportunities of those who preceded us in the veterinary field, and it is a reasonable presumption that the next generation will regard us in the same light. It is to be wished that such may be the case for the sake of our science and the cause of mankind. It is the duty of every man to make the best of his opportunities; to aspire to the highest ideals, so that when his career is closed the world will be better for his having lived in it.

"This brings us up to the question as to whether we—not only as individuals, but as the representative veterinary organization of this Western world—are doing all that we can to elevate our profession, our art, and our science; whether we are

constantly forging ahead in all that goes to increase our efficiency, our character, and our qualifications.

"At the very foundation of all progress in a learned science is knowledge, and in the short span of human life the preparation of the mind for the great work of modern veterinary medicine must of necessity be accomplished through systematic training; and for this purpose schools devoted to specially instruct men in this science have been established. The first one in this country was founded nearly fifty years ago, and since that day they have increased in number, in the quantity and quality of the instruction imparted, as well as the length of their terms, and the general equipments. It is neither necessary nor pertinent that I should dwell upon the struggles of the pioneer schools, nor the gradual merging of many of them with universities, some of which are so endowed by the State that they no longer have to count the revenue received from students to meet their obligations. Others have the moral and educational support of endowed institutions, without receiving from them financial assistance, thus enabling the schools to impart better education to their students, but at the same time leaving the veterinary faculty to fight against poverty, which in almost any other country or any other calling would result in lassitude and indifference; but the spirit which brought us to our present estate still dominates our profession, and pride and enthusiasm take the place of dollars and cents. A third class of school is the purely private college, without affiliation or assistance from any quarter, where the income from student-fees must meet all current expenses, pay the faculty, provide a building, and yield something upon the investment. To obtain students these latter schools are in direct competition with the endowed institutions, where tuition is free, the faculty provided by the State, and the equipment furnished by the same hand. That it has been hard and nigh impossible to harmonize the educational question under such diverse and adverse conditions, is scarcely to be wondered at; it is a source of congratulation that so much has been accomplished under such circumstances. To have crushed out of existence by harsh and arbitrary rules any of the schools which struggled in an honorable manner against the tide of events, would have probably been a serious error upon the part of this Association. Its duty was, and its pleasure has been, to lift the standard by easy stages, to assist the schools by moral and material support, yet always keeping the highest ideals in plain view.

"There seems to exist a somewhat general impression at present that we are not advancing in this matter of education at the same rate maintained for the past two decades; that our machinery has become rusty, and does not move with the freedom that formerly characterized it; that there is great need of reform in the matter of the entrance examination, in greater uniformity in the length of the courses at the various schools, and in their curricula. It would certainly seem but fair and just that an American diploma recognized by this Association should be a definite quality; that the holder of one diploma should have started upon his veterinary studies with the same basic education, have passed through a similar course of instruction and final requirement as another one. But how can we accept this when the one has emerged from a school with a high entrance examination, a long and thorough course of instruction, and with a rigid competition for his diploma, while the other has been given a farcical entrance examination, a short and imperfect course, and gains possession of his parchment for the reason that he has spent the requisite number of months at the institution. Yet, if the latter but fulfils the technical demands of our elastic regulations, he is the same in every sense in our eyes.

"The great question which confronts us to-day is the harmonizing of these divergent conditions without injury to those schools which are honestly striving to lift themselves to the higher standard, and at the same time to strike a determined blow at those which have no other ambition than mercenary gain. To accomplish this, to make a more uniform standard for the American school, is the question which demands thought and action. It has been suggested that this Association exercise a censorship over the schools of the country by the appointment of a large committee to see to it that they live up to the statements in their announcements; but the statements are so miscellaneous that it may be possible for a school to fulfil the letter of our demands and yet evade the spirit of our requirements. It is to be regretted that the Association of Veterinary Faculties and Examining Boards of North America has ceased to be an active organization, for through it the very questions which now seem so difficult of solution could be discussed and settled. It is the logical tribunal to harmonize these irregularities. I am impressed very forcibly with the conviction that our greatest and most urgent need is uniformity in the qualification of the matriculant; that this reform can best be brought about

by a reorganization of the Association of Faculties, with the co-operation of the A. V. M. A., which latter could elect certain of its membership as delegate-members of the Faculties Association; and it might be possible by the mutual interests represented that censors of the schools could be selected by this affiliated Association. That being accomplished, it would then become possible for the Association to *know* that colleges whose graduates are recognized by it fulfil their obligations.

"It is to be hoped that the present meeting will take some steps looking to the solution of this important problem.

"The international character of our Association is illustrated and emphasized at this meeting by the wide distribution of our essayists, for you will observe by reference to the programme that the authors of the papers to be presented represent many lands—Germany, France, Canada, the Philippines, and from every quarter of the United States. The subjects treated of also represent every phase of veterinary science, so that every member and professional visitor will find something which directly appeals to him, no matter in what field he may labor. The American Veterinary Medical Association is therefore no longer a continental organization for all the Americas, but it stands for veterinary progress in all the world.

"For the present meeting invitations were extended through the Department of State to the governments of Great Britain, Germany, France, Italy, Denmark, Japan and other foreign countries, in the hope that some would send representatives to this meeting. We have been honored by the Minister of Education of Japan, who has appointed as the representative of his Government Dr. K. Tsuno, professor of Veterinary Science in the Imperial University of Tokio, and I tender to Dr. Tsuno, on behalf of this Association, a warm greeting and our hand of fraternal friendship, and extend him a cordial invitation to the privileges of the floor upon all subjects in which he may feel an interest. This practice is a good one, and should be encouraged, and it would be an act of international courtesy, and one calculated to result in benefit to this country, if our government should delegate a representative to similar veterinary conventions in the Old World.

"Previous to the communication of Prof. Koch to the London Tuberculosis Congress in 1901, in which he maintained the duality of tuberculosis from human and bovine sources, the veterinary profession had pinned its faith and reputation to the doctrine that human beings can and do contract tuberculosis by

eating the meat and drinking the milk of cattle affected with that disease. At their insistence laws had been enacted and regulations enforced looking to the prevention of the consumption of food products from such sources. The commanding position of Prof. Koch as the discoverer of the tubercle bacillus, gave great weight to his conclusions, so that his statements met with world-wide publicity and commanded a respect which would not have been accorded to any other living man. In spite of the blow which was thus dealt to science and to sanitation, the veterinary profession never for a moment admitted the contention of Koch, but went about a search for the exact truth with a will, and every investigator and every commission which has yet made public their conclusions have upheld the theory of the unicity of the tubercle bacilli. Strong and convincing among such investigations was the report detailed by our own Bureau of Animal Industry, conveyed through its Chief, Dr. Salmon, at our fortieth annual meeting. Nearly a year afterwards the Commission appointed by King Edward corroborated these conclusions. The attitude of Prof. Koch has therefore been of real service, particularly to veterinary science, for it so stimulated investigation as to force a solution of the mooted question and incidentally to prove the soundness of the position which this profession has persistently held.

"Veterinary science has lost one of its most distinguished sons, the profession one of its hardest workers and most loyal colleagues, and this Association a valued and beloved honorary member. Prof. Edmond Nocard, of France, died a little over a year ago, and at our Ottawa meeting our sense of deep bereavement was expressed in suitable resolutions, while his likeness, draped in mourning, hung upon our walls. While his great work is sure to preserve his memory and his reputation to posterity, it is proposed to show the appreciation of his colleagues throughout the world by erecting a monument to his memory at his home city in France. The veterinarians of every civilized nation have sent to the committee a contribution; in the United States almost every association which has convened since the project took shape has offered its mite, so that the memorial will constitute a great popular testimonial to his worth and work. We, as the representative veterinary body of the Western World should feel it a pleasant privilege to forward a generous contribution to the fund.

"The subject of a Mutual Benefit Association has for some time been agitated by a number of our members. It was com-

mended by my two immediate predecessors in their annual messages, and our worthy fellow-member, Dr. Dougherty, presented a draft of a proposed constitution and by-laws at our last meeting, which proved a source of considerable discussion. Such organizations flourish in foreign countries, and in the medical profession of this country. It would seem rather hazardous to assume that it would not be successful with us. It is to be hoped that the committee appointed to report upon its feasibility will render a full and comprehensive exposition of the subject at this meeting.

"While the entertainment provided by local veterinarians at meetings for the past seven or eight years reflect their goodness of heart and their appreciation of the honor they feel in the selection of their cities for the holding of our conventions, and, while the Association feels, I am sure, deeply grateful for their consideration and courtesy, I am convinced that elaborate social entertainment is mistaken kindness to us as an association. There is no sort of question but that the custom inaugurated a few years ago of combining social pleasure with the more serious matters of the programme, has been of great benefit to our membership as individuals and as an association. It is very certain that every busy practitioner owes it to his health and his happiness, as well as to his family, to indulge in an occasional vacation from the wearing exactions of routine practice. To have those whom he loves share the pleasures of his holiday can but add greatly to his own enjoyment. So that to have members accompanied by their wives or others of their households is much to be encouraged. Pleasant diversions for them in the Convention city, while husbands and fathers are engaged in the deliberations of the meeting, are also necessary to complete their enjoyment, and it is reasonable and right. But this should not go to the extent of constituting a burden upon the local members. I am convinced that invitations from certain localities are withheld because of the great financial responsibility which is carried with it. Those with experience know that the burden always falls upon a few, and if the same lavish expenditure in entertainment is maintained, it will be but a short time before the Executive Committee will find themselves without a bidder for our annual convention. I can say to you that hosts are growing fewer each year, while we should be sought from all quarters. If a city, centrally located, of easy access to the greatest veterinary population, were annually selected, and the local veterinarians would secure a hall with excellent acoustic

facilities, and merely chaperon the association in the matter of hotels, clinic accommodations, etc., I am sure as great advantages scientifically could be secured, and at the same time the local veterinarians would not be overtaxed, and their guests would not be embarrassed by such a debt of gratitude.

"This is certainly not the least important matter that will engage our attention at this meeting.

"I shall not consume more of the time of this convention by imposing upon it my own impressions of the subjects which appear to call for its consideration at this time, as there is an immense amount of business to be disposed of within the next few days. I will merely express the hope that the routine business of the Association will be disposed of with as much celerity as is consistent with thoroughness, so that all the time possible may be devoted to the scientific section of the programme."

#### THE ATTENDANCE.

By motion the roll-call was dispensed with, and the members and visitors were notified to register their names and addresses upon cards kept in a booth at the entrance. From these cards the following are shown to have been present during the meeting :

*Members.*—F. Abele, Quincy, Mass. ; F. R. Ahlers, Lamotte, Ia. ; F. E. Anderson, Findlay, O. ; J. S. Anderson, Seward, Neb. ; J. G. Annand, Minneapolis, Minn. ; A. H. Baker, Chicago, Ill. ; L. R. Baker, S. St. Joseph, Mo. ; J. A. Barnett, Edwardsville, Ill. ; F. H. Barr, Pana, Ill. ; S. H. Bauman, Birmingham, Ia. ; W. L. Beebe, St. Anthony Park, Minn. ; E. C. Beckett, Boston, Mass. ; Roscoe R. Bell, Brooklyn, N. Y. ; G. H. Berns, Brooklyn, N. Y. ; A. Bostrom, Minden, Neb. ; E. Brainerd, Memphis, Mo. ; S. Brenton, Detroit, Mich. ; J. J. Brougham, St. Louis, Mo. ; F. F. Brown, Kansas City, Mo. ; L. D. Brown, Hamilton, Mo. ; D. C. Burnett, St. Louis, Mo. ; Tate Butler, Raleigh, N. C. ; M. V. Byers, Osceola, Neb. ; S. H. Caldwell, Chicago, Ill. ; C. A. Cary, Auburn, Ala. ; W. S. Cass, Lincoln, Neb. ; K. G. Cherrington, E. St. Louis, Ill. ; J. B. Clancy, National Stock Yards, Ill. ; Chas. E. Cotton, Minneapolis, Minn. ; T. Bent Cotton, Mt. Vernon, O. ; C. W. Crowley, St. Louis, Mo. ; W. H. Dalrymple, Baton Rouge, La. ; Andrew Darling, St. Louis, Mo. ; D. A. Davison, Princeton, Ind. ; L. E. Day, Chicago, Ill. ; W. E. Day, So. St. Joseph, Mo. ; Wm. Dougherty, Baltimore, Md. ; G. W. Dunphy, Quincy, Mich. ; F. T. Eisenman, Louisville, Ky. ; Chas. Ellis, St. Louis, Mo. ; J. E. Ellis,

Summer Hill, Ill. ; A. A. Etienne, St. Hyacinthe, Quebec ; J. W. Fink, Washington, D. C. ; Paul Fischer, Columbus, O. ; S. H. Gilliland, Phila., Pa. ; C. G. Glendinning, Clinton, Ill. ; Geo. H. Glover, Ft. Collins, Col. ; Wesley M. Thomas, National Stock Yards, Ill. ; J. H. Gould, 11th Cavalry, Fort Riley, Kan. ; R. Graham, E. St. Louis, Ill. ; J. O. Greeson, Kokomo, Ind. ; J. W. Griffith, Cedar Rapids, Ia. ; O. A. Hanson, Chicago, Ill. ; W. F. Heyde, St. Louis, Mo. ; C. H. Higgins, Ottawa, Can. ; J. G. Hill, Jacksonville, Fla. ; C. J. Hinkley, Odebolt, Ia. ; W. C. Holden, Delphos, O. ; F. W. Hopkins, Cairo, Ill. ; W. Horace Hoskins, Phila., Pa. ; D. Arthur Hughes, E. St. Louis, Ill. ; F. A. Illstrup, Willmar, Minn. ; M. Jacob, Ames, Ia. ; J. W. Jameson, Paris, Ky. ; C. G. Jennings, Morris, Minn. ; H. Jensen, Weeping Water, Neb. ; G. A. Johnson, Sioux City, Iowa ; Geo. B. Jones, Sidell, Ill. ; R. A. Kammerer, St. Louis, Mo. ; B. F. Kaupp, Kansas City, Mo. ; Wm. Henry Kelly, Albany, N. Y. ; A. T. Kinsley, Kansas City, Mo. ; D. W. Kirby, St. Paul, Minn. ; J. W. Klotz, Noblesville, Ind. ; G. A. Knapp, Millbrook, N. Y. ; W. A. Knight, Houston, Tex. ; M. E. Knowles, Helena, Mont. ; C. G. Lamb, Denver, Colo. ; M. B. Lamb, Columbus, O. ; James Law, Ithaca, N. Y. ; G. Ed. Leech, Winona, Minn. ; W. W. Lichty, Woodstock, Ill. ; C. Loveberry, Portland, Oreg. ; Wm. Herbert Lowe, Paterson, N. J. ; C. C. Lyford, Minneapolis, Minn. ; R. P. Lyman, Hartford, Conn. ; C. M. McFarland, So. St. Joseph, Mo. ; M. H. McKillip, Chicago, Ill. ; M. McNally, St. Louis, Mo. ; F. H. Mackie, Baltimore, Md. ; James Mahon, St. Louis, Mo. ; C. J. Marshall, Phila., Pa. ; N. S. Mayo, Manhattan, Kan. ; W. H. Meadors, National Stock Yards, Ill. ; L. A. Merillat, Chicago, Ill. ; J. C. Meyer, Cincinnati, O. ; Chester Miller, St. Louis, Mo. ; D. H. Miller, Harlan, Ia. ; J. R. Mitchell, Evansville, Ind. ; V. A. Moore, Ithaca, N. Y. ; J. T. Nattress, Delavan, Ill. ; G. E. Nesom, Clemson College, S. C. ; J. V. Newton, Toledo, O. ; G. B. Nicholas, Kansas City, Mo. ; J. D. Nighbert, Pittsfield, Ill. ; O. G. Noack, Reading, Pa. ; J. C. Norton, Phoenix, Arizona ; H. F. Palmer, Detroit ; A. T. Peters, Lincoln, Neb. ; J. M. Phillips, St. Louis, Mo. ; R. A. Phillips, Plaquemine, La. ; D. A. Piatt, Lexington, Ky. ; C. H. Playdon, Reading, Mass. ; Alex. Plummer, 4th Cav., Ft. Riley, Kan. ; E. C. Porter, New Castle, Pa. ; J. W. Poole, Cedar Rapids, Iowa ; T. B. Pote, St. Louis, Mo. ; H. A. Presler, Fairbury, Ill. ; E. M. Ranck, Natchez, Miss. ; John J. Repp, Phila., Pa. ; M. H. Reynolds, St. Anthony Park, Minn. ; J. F. Roub, Monroe, Wis. ; C. J. Rhodes, Beloit, Wis. ; W. H. Richards, Emporia, Kan. ; A. G.

G. Richardson, Knoxville, Tenn. ; G. H. Roberts, Indianapolis, Ind. ; James L. Robertson, New York City, N. Y. ; James Robertson, Chicago, Ill. ; T. E. Robinson, Westerly, R. I. ; J. G. Rutherford, Ottawa ; D. E. Sawyer, Jackson, Mo. ; V. Schaefer, Tekamah, Neb. ; E. P. Schaffter, Cleveland, O. ; J. W. Scheibler, Memphis, Tenn. ; Chas. Schmitt, Dodgeville, Wis. ; J. R. Shaw, Honolulu, T. H. ; E. H. Shepard, Cleveland, O. ; C. R. Simpson, Somerville, Mass. ; H. C. Simpson, Denison, Iowa ; Thos. E. Smith, Jersey City, N. J. ; J. D. Sprague, David City, Neb. ; U. S. Springer, Grand Rapids, Mich. ; H. E. States, Detroit, Mich. ; H. F. Steele, 8th Cav., Ft. Sill, Okla. ; R. A. Stephens, National Stock Yards, Ill. ; S. Stewart, Kansas City, Mo. ; N. I. Stringer, Watseka, Ill. ; W. A. Stuhr, Ames, Iowa ; Frederick Taylor, Sewickley, Pa. ; Thos. Thacker, Renfrew, Ont. ; R. Thomas, E. St. Louis, Ill. ; W. A. Thomas, Lincoln, Neb. ; Arthur Trickett, Kansas City, Mo. ; K. Tsuno, Tokio, Japan ; James Vincent, Shenandoah, Ia. ; Geo. Waddle, Kalamazoo, Mich. ; G. M. Walrod, Storm Lake, Ia. ; A. R. Ward, Berkeley, Calif. ; S. H. Ward, St. Paul, Minn. ; Robert Weir, Rutland, Vt. ; G. F. Wescott, Portland, Me. ; G. R. White, Nashville, Tenn. ; T. E. White, Sedalia, Mo. ; S. S. Whitbeck, Decorah, Ia. ; O. G. Whitestine, Huntington, Ind. ; N. P. Whitmore, Gardner, Ill. ; E. V. Wilcox, Washington, D. C. ; W. L. Williams, Ithaca, N. Y. ; J. F. Winchester, Lawrence, Mass. ; L. E. Willyoung, Ft. Sam Houston, Tex. ; Chas. Winslow, Rockland, Mass. ; A. L. Wood, Hampton, Ia. ; B. T. Woodward, Oxford, Pa. ; A. M. Wray, Richmond, Ill. ; G. R. Young, Omaha, Neb.—(175.)

*Visiting Veterinarians.*—H. A. Arpke, Sheboygan, Wis. ; B. F. Barber, Fonda, Ia. ; Geo. Bedinger, St. Louis, Mo. ; C. F. Behrens, O'Fallon, Ill. ; H. Bradley, Winsor, Mo. ; E. H. Callander, Zanesville, O. ; J. W. Chenowith, Albany, Mo. ; J. W. Choate, Columbus, O. ; W. E. Clemons, Granville, O. ; J. H. Cock, St. Louis, Mo. ; F. H. Davis, Chicago, Ill. ; W. A. Dougherty, Bucyrus, O. ; P. A. Dillahunt, Springfield, O. ; H. F. Eckert, Markesa, Wis. ; C. S. Evans, So. Omaha, Neb. ; R. G. Flowers, Ft. Worth, Tex. ; G. G. Grundy, St. Louis, Mo. ; H. J. Hagerty, Dubuque, Ia. ; H. B. Hallenberger, Palmyra, Mo. ; H. M. Hart, Columbus, O. ; E. M. Hendy, Jefferson City, Mo. ; N. W. Hillock, Columbus, O. ; J. B. Hollenbeck, Indianapolis, Ind. ; H. B. Hood, E. St. Louis, Ill. ; L. D. Horner, Woodstown, N. J. ; W. J. Hossley, Vicksburg, Miss. ; J. J. Hougendobler, St. Louis, Mo. ; T. E. Jones, Newark, O. ; R. L.

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Kelly, National Stock Yards, Ill.; C. A. Krause, Salisbury, Mo.; L. D. Le Gear, Austin, Tex.; F. Lett, Seymour, Ind.; R. C. Lew, Mascoutah, Ill.; W. K. Lewis, St. Louis, Mo.; J. H. Lowe, E. St. Louis, Ill.; D. F. Luckey, Columbia, Mo.; J. A. Madden, Ithaca, N. Y.; W. J. Martin, Kankakee, Ill.; W. E. Martin, Perry, Mo.; T. J. Menestrina, E. St. Louis, Ill.; C. D. Meredith, Vinita, I. T.; L. B. Michael, Moberly, Mo.; E. K. Paine, Santa Clara, Cuba; S. V. Ramsay, Terre Haute, Ind.; J. B. Reidy, E. St. Louis, Ill.; J. J. Richardson, Marcus, Ia.; A. Robertson, Mt. Carmel, Ill.; W. Runge, Newark, N. J.; J. R. Sanders, Corydon, Ia.; A. J. Savage, Colorado Springs, Colo.; J. G. Schreck, Troy, Ill.; W. F. Scott, Oak Park, Ill.; H. J. Sebaugh, Farmington, Ill.; S. L. Shaw, E. St. Louis, Ill.; D. C. Smith, Frankford, Indiana; Stanley Smith, Columbia, Mo.; G. W. Stanbridge, Winchendon, Mass.; W. S. Stinson, Walhalla, N. Dak.; W. W. Talbot, Oskaloosa, Ia.; R. H. Thomas, National Stock Yards, Ill.; R. M. Thompson, Darlington, Wis.; H. J. Timmermann, St. Louis, Mo.; A. Travis, Litchfield, Ill.; C. O. Van Winkle, Hillsboro Ia.; J. W. Watson, St. Louis, Mo.; W. E. White, Pittsburg, Pa.; M. C. Wiley, St. Louis, Mo.; W. J. Williams, Franklin, Ind.; J. H. Youngs, Belmont, N. Y.—(68)

*Ladies and Children.*—Mesdames F. E. Anderson, Findlay, O.; A. H. Baker, Chicago, Ill.; S. Brenton, Detroit, Mich.; H. B. Brooks, Philadelphia, Pa.; C. E. Cotton, Minneapolis, Minn.; A. Darling, St. Louis, Mo.; D. A. Davison, Princeton, Ind.; Chas. Ellis, St. Louis, Mo.; J. E. Ellis, Summer Hill, Ill.; Paul Fischer, Columbus, O.; G. G. Grundy, St. Louis, Mo.; C. J. Hinkley, Odebolt, Ia.; W. C. Holden, Delphos, O.; W. Horace Hoskins, Philadelphia, Pa.; H. Jensen, Weeping Water, Neb.; J. W. Jameson, Paris, Ky.; G. A. Jarman, Chestertown, Md.; G. A. Johnson, Sioux City, Ia.; W. H. Kelly, Albany; Lizzie Keyes, Summer Hill, Ill.; G. A. Knapp, Millbrook, N. Y.; W. A. Knight, Houston, Tex.; M. E. Knowles, Helena; G. Ed. Leech, Winona, Minn.; C. C. Lyford, Minneapolis, Minn.; F. H. Mackie, Baltimore, Md.; J. Mahon, St. Louis, Mo.; C. J. Marshall, Philadelphia, Pa.; T. J. Menestrina, E. St. Louis, Ill.; J. V. Newton, Toledo, O.; D. A. Piatt, Lexington, Ky.; C. H. Playdon, Reading, Mass.; E. C. Porter, New Castle, Pa.; M. P. Rahilley, Fargo, N. Dak.; E. M. Ranck, Natchez, Miss.; Louis Rittger, St. Louis, Mo.; V. Schaefer, Tekamah, Neb.; J. W. Scheibler, Memphis, Tenn.; J. R. Shaw, Honolulu, T. H.; C. R. Simpson, Somerville,

Mass. ; H. E. States, Detroit, Mich. ; S. Stewart, Kansas City, Mo. ; G. F. Wescott, Portland, Me. ; G. R. White, Nashville, Tenn. ; B. T. Woodward, Oxford, Pa. ; Misses F. C. Baker, Chicago, Ill. ; R. L. Brenton, Detroit, Mich. ; Nellie Carroll, St. Paul, Minn. ; Mary L. Crowley, St. Louis, Mo. ; Emily Crowley, St. Louis, Mo. ; Margaret Flint, Reading, Mass. ; Nellie Adele Fuller, Chicago, Ill. ; Ray Harris, St. Louis, Mo. ; Rutha Shackford, Reading, Mass. ; Elizabeth White, Nashville, Tenn. ; Missie White, Nashville, Tenn. ; May Williams, New York ; Master Cheston M. Hoskins, Philadelphia, Pa.—(58).

*Other Visitors.*—C. B. Banks, Memphis ; J. C. Booker, Alton, Ill. ; H. P. Brooks, Philadelphia, Pa. ; C. P. Field, St. Louis, Mo. ; H. J. Keveny, New York ; B. F. Kimball, Pana, Ill. ; L. M. Klutz, Clinton, Mo. ; L. H. Laidley, M. D., Medical Director, Louisiana Purchase Exposition, St. Louis ; F. P. McNally, St. Louis, Mo. ; C. C. Mills, Decatur, Ill. ; Wm. R. Ray, M. D., St. Louis, Mo. ; E. Richardson, Marcus, Ia. ; C. W. Springer, Connellsville, Pa. ; E. S. Stevens, Mt. Morris, Ill. ; R. S. Taylor, St. Paul, Minn. ; Hon. Henry H. Wernse, President Merchant's Exchange, St. Louis, Mo.—(16).

The reading of the minutes of the last annual meeting was dispensed with, and the printed proceedings were adopted in lieu thereof.

#### NEW MEMBERS ELECTED.

During the various sittings of the Executive Committee the following applications for membership were favorably recommended to the Association, and they were duly elected :

*Active Members.*—F. R. Ahlers, Lamotte, Ia. ; L. R. Baker, S. St. Joseph, Mo. ; J. A. Barnett, Edwardsville, Ill. ; F. H. Barr, Pana, Ill. ; S. H. Bauman, Birmingham, Ia. ; W. L. Beebe, St. Anthony Park, Minn. ; A. F. Bollinger, Brooklyn, N. Y. ; J. J. Brougham, St. Louis, Mo. ; L. D. Brown, Hamilton, Mo. ; G. W. Browning, San Antonio, Tex. ; A. H. Burling, Philadelphia, Pa. ; Pedro L. del Caril, Buenos Ayres, Argentine Republic ; B. E. Chaney, Monroe, La. ; K. G. Cherrington, E. St. Louis, Ill. ; W. H. Cole, Broken Bow, Neb. ; W. B. Craig, Indianapolis, Ind. ; F. W. Culver, Longmont, Colo. ; L. Enos Day, Chicago, Ill. ; W. E. Day, S. St. Joseph, Mo. ; E. C. Dingley, Villa Nova, Pa. ; J. E. Ellis, Summer Hill, Ill. ; C. S. Evans, Bethany, Neb. ; Adam Fisher, Charlotte, N. C. ; C. G. Glendinning, Clinton, Ill. ; W. M. Goff, E. St. Louis, Ill. ; Ralph Graham, National Stock Yards, Ill. ; Marvin Gregory, E. St. Louis, Ill. ; Seymour Hadwen, Nelson, B. C. ; H. B. Hamilton, New Bedford, Mass. ;

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Ingild Hansen, San Antonio, Tex. ; O. A. Hansen, Chicago, Ill. ; C. M. Haring, Berkeley, Calif. ; Alex. Harthill, Jr., Louisville, Ky. ; Jacob Helmer, Scranton, Pa. ; D. Arthur Hughes, E. St. Louis, Ill. ; C. G. Jennings, Morris, Minn. ; Geo. B. Jones, Sidell, Ill. ; E. L. Kalb, Rochester, Minn. ; R. V. Kammerer, St. Louis, Mo. ; A. T. Kinsley, Kansas City, Mo. ; B. W. Kirby, St. Paul, Minn. ; J. W. Klotz, Noblesville, Ind. ; Chas. G. Lamb, Denver, Col. ; M. F. Leffingwell, Austin, Minn. ; Wm. J. Lentz, Hatboro, Pa. ; W. W. Lichty, Woodstock, Ill. ; C. C. Lipp, St. Anthony Park, Minn. ; Wm. M. McKellar, Fort Worth, Tex. ; Michael McNalley, St. Louis, Mo. ; James Mahon, St. Louis, Mo. ; W. H. Meadors, E. St. Louis, Ill. ; W. E. Martin, Winnipeg, Man. ; H. J. Milks, Candor, N. Y. ; D. H. Miller, Harlan, Ia. ; T. E. Munce, Washington, Pa. ; J. T. Nattress, Delavan, Ill. ; G. B. Nicholas, Kansas City, Mo. ; S. M. Nissley, Middletown, Pa. ; A. B. Niven, S. Paul, Minn. ; Henry Nunn, McMinnville, Oreg. ; J. O'Connor, Hunter, N. D. ; Edgar Odell, New York ; Arthur Paul, National Stock Yards, Ill. ; F. M. Perry, Fort Fairfield, Me. ; R. A. Phillips, Plaquemine, La. ; J. W. Poole, Cedar Rapids, Ia. ; Richard H. Power, Artillery Corps, Fort Riley, Kans. ; J. O. F. Price, E. St. Louis, Ill. ; G. A. Roberts, Raleigh, N. C. ; G. H. Roberts, Indianapolis, Ind. ; J. E. Robertson, Monona, Ia. ; J. W. Robinson, Coal Harbor, N. D. ; M. Rosenberger, Pullman, Wash. ; J. F. Roub, Monroe, Wis. ; Jos. R. Shaw, Honolulu, T. H. ; A. S. Shealy, Clemson College, S. C. ; D. G. Shumway, S. St. Paul, Minn. ; H. E. States, Detroit, Mich. ; J. A. Stevenson, Carman, Man. ; W. A. Stuhr, Ames, Ia. ; Frederick Taylor, Sewickley, Pa. ; R. Thomas, E. St. Louis, Ill. ; James Vincent, Shenandoah, Ia. ; Robert Weir, Rutland, Vt. ; G. F. Wescott, Portland, Me. ; M. S. Whitcomb, St. Paul, Minn. ; Mark White, Jr., Denver Col. ; M. M. White, Shreveport, La. ; O. G. White-stine, Huntington, Ind. ; John J. D. Whyte, Sherbrooke, Que. ; L. E. Willyoung, Artillery Corps, Fort Sam Houston, Tex. ; W. D. Wright, N. Fort Worth, Tex.—(92.)

*Reinstated to Active Membership.*—Andrew Darling, St. Louis, Mo. ; F. T. Eisenman, Louisville, Ky. ; J. Wm. Fink, Washington, D. C. ; J. M. Phillips, St. Louis, Mo.—(4.)

*Elected to Honorary Membership.*—E. V. Wilcox, A. M., Ph. D., Washington ; K. Tsuno, Professor of Veterinary Sanitary Science and Police, Imperial University, Tokio, Japan.—(2.)

#### REPORTS OF REGULAR AND SPECIAL COMMITTEES.

The various regular and special committees either presented

their reports the first day or deferred them until later in the meeting when not in readiness for presentation.

#### *Mutual Aid Association.*

Chairman Dougherty, of the committee to investigate the practicability of establishing a Mutual Aid Association, presented the written replies of the various members of his committee, which were unanimously adverse to the proposition, and the committee was discharged with thanks.

#### *Pharmacopœia.*

Chairman Ranck, of the Committee on Pharmacopœia, presented a verbal report to the effect that after vainly endeavoring for some years to discover if it were possible or practical to undertake such an enormous task, he found that to produce a work in a manner worthy of the Association would involve too much time, labor and expense, and he thought the project should be abandoned. This view was also voiced by Drs. Merillat and Bell (other members of the committee); and at their united request the committee was discharged.

#### *Diseases.*

The Committee on Diseases presented a splendid report. Heretofore this committee has either failed to report or has accompanied it by an apology, explaining that the subject was too large to be handled. A few years ago it was instructed by the Association to treat of a few particular diseases each year. Dr. Charles H. Higgins, of Ottawa, Can., was made chairman last year, and a strong committee was named to support him, the appointees being strong members of the profession in varied sections of the country. They were Drs. A. S. Wheeler, of North Carolina; C. A. Cary, of Alabama; V. A. Moore, of New York; N. S. Mayo, of Kansas, and A. R. Ward, of California. Each of these members brought or forwarded a scientific paper on a well-investigated topic. Dr. Higgins treated of "Actinobacillosis," in which he had made extensive bacteriological investigation. The paper was discussed by Drs. Mayo, Ward, Rutherford and Wilcox, which brought forth many points through the counter-discussion with Dr. Higgins.

"Nymphomania in Cows Due to Ovarian Cysts," by Dr. A. S. Wheeler, proved to be provocative of much discussion, principally as to the method of rupturing the cysts, in which Drs. Williams, Mayo and Lyman took part.

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Dr. V. A. Moore chose "Infectious Abortion in Cattle" as his section of the committee's work, and it was in the nature of a statement of his researches to find the germ which produces it. Dr. J. G. Rutherford was the principal contributor to the debate.

Dr. N. S. Mayo gave his experience with "Scabies in Cattle," reserving the reading of his report, however, until a paper upon the same subject by Dr. Glover, of Colorado, was offered, when they were discussed at the same time.

Dr. Archibald R. Ward contributed as his part of the report a résumé of the diseases of fowl, as he has investigated them on the Pacific Coast. His experience has been chiefly with roup (a form of fowl diphtheria) and tuberculosis. He gave some wonderful statistics of the extent of chicken raising around San Francisco. In Saloma County alone he estimated the output of the hens at 30,000,000 dozen eggs annually, which, if placed end to end would reach 1400 miles. He had tested tuberculosis in fowl with tuberculin, but had met with but slight results. This subject was discussed by Drs. Trickett, White and Kaupp.

#### *Excellence and Soundness.*

The Committee on Standard of Excellence and Soundness reported both through Chairman George H. Berns, of New York, and Dr. M. H. Reynolds, of Minnesota. After giving careful consideration to the question of soundness for a year, Dr. Berns was of opinion that no satisfactory rules could be laid down for the guidance of veterinarians upon this subject, and asked that his committee be discharged, thereby meeting the fate of all similar committees and individuals who have attempted this knotty problem. Where lesions and conformations have their significance based upon conditions found in each individual case, how can it be possible to lay down hard and fast rules for subjects where the conditions are not known? It is fortunate for veterinary science that decisions can only be arrived at by the veterinarian in the presence of the particular subject, else it would be possible to dispense with their services in the examination of horses for soundness, simply using a "guide book" for topographical imperfections. However, a discussion of the subject is always fascinating and instructive, and its incorporation in the programmes of association meetings is beneficial and certain to provoke plenty of debate. Dr. Reynolds dealt with the question of "excellence," and contributed a paper more up-

on the conformation and external form of the horse. We have little doubt but that this committee will eventually be succeeded by one upon Animal Husbandry, and in the hands of men who give the subject careful thought and investigation will prove a valuable one for the members.

#### *Intelligence and Education.*

Chairman E. B. Ackerman, of New York, forwarded the report of this committee, and it was read by Dr. Ranck, the discussion upon it being deferred until after the reading of Dr. Liautard's paper upon "Needed Reforms in Veterinary Education in America." His report dealt entirely with the colleges of the country, and further reference to this report will be given in the summary of the proceedings of the St. Louis meeting.

#### REPORTS OF STATE SECRETARIES.

Never before have the reports of the Resident Secretaries been so numerous nor so interesting, more than half of them responding either in person or by mailed report. There are 49 of such Secretaries, seventeen of whom read or gave verbal reports, while nine sent their reports to the Secretary. The former were as follows: Arizona and New Mexico, J. C. Norton; California, A. R. Ward; Colorado and Utah, Geo. H. Glover; Florida, J. G. Hill; Indiana, J. O. Greeson; Kansas, N. S. Mayo; Kentucky, D. A. Piatt; Michigan, G. W. Dunphy; Minnesota, J. G. Annand; Mississippi, E. M. Ranck; Missouri, Chester Miller; Montana, M. E. Knowles; Nebraska, G. R. Young; New York, Wm. Henry Kelly; Pennsylvania, C. J. Marshall; Quebec, A. A. Etienne; Tennessee, G. R. White. The latter were as follows: Arkansas, R. R. Dinwiddie; British Columbia, Johnson Gibbons; Illinois, E. L. Quitman; Maine, A. Joly; Nevada and Idaho, J. O. Jacobs; Nova Scotia, Wm. Jakeman; Texas, H. D. Paxson; Virginia, John Spencer; Wisconsin, Charles Schmitt.

#### ELECTION OF OFFICERS.

The election of officers for the ensuing year occurred in the afternoon of the first day. Dr. Wm. Herbert Lowe, of New Jersey, placed the name of Dr. M. E. Knowles, of Montana, before the convention, and it was seconded in most eulogistic speeches by Drs. Rutherford, Winchester, Lyford and Mayo, and so irresistible was the tide toward the gallant son of Montana that no other gentlemen were proposed, though it was generally understood that two or three expected to enter the race.

To obtain five Vice-Presidents the following gentlemen were placed in nomination: Drs. J. G. Rutherford, of Canada; George R. Young, of Nebraska; George H. Berns, of New York; C. C. Lyford, of Minnesota; George W. Dunphy, of Michigan; George C. Glover, of Colorado; E. M. Ranck, of Mississippi; and R. P. Lyman, of Connecticut. The five receiving the largest number of votes were Drs. Rutherford, Ranck, Young, Dunphy, and Lyman, ranking in the order given. For Secretary, there was no opposition to the former incumbent, Dr. Repp, and by motion the President cast the vote of the Association for his election. Dr. Lowe was re-elected without opposition. The officers for 1904-05 are therefore as follows:

President—M. E. Knowles, of Montana.

Vice-Presidents—J. G. Rutherford, of Canada.

—E. M. Ranck, of Mississippi.

—G. R. Young, of Nebraska.

—G. W. Dunphy, of Michigan.

—R. P. Lyman, of Connecticut.

Secretary—John J. Repp, of Pennsylvania.

Treasurer—Wm. Herbert Lowe, of New Jersey.

#### PAPERS AND DISCUSSIONS.

The first paper under this heading presented was that entitled "When to Operate," by Dr. L. A. Merillat, of Illinois, and it was a splendid exposition of the subject. Of course such a document cannot be summarized by a reviewer, as the immensity of the subject made it only possible for the essayist to treat it in that manner, but his conclusions were most positive and clear cut. The paper is printed in full elsewhere in this number of the REVIEW. It provoked a general discussion, principally upon the subject of choke in the soliped, the essayist having made the assertion that, as a rule, the soliped was never the object of choking save upon masticated food, solid objects being confined to ruminating animals. Those taking part in the debate were Drs. Beckett, Williams, Young, Baker, Shepard, Law, Robertson and Griffiths.

"Creeps, an Osteomalachial Disease of Cattle," by Dr. Joseph W. Parker, of Texas, was read by former President Stewart, and discussed by Drs. Williams, Higgins and Law.

"The Cattle Mange Problem in the West" was presented by Dr. George H. Glover, of Colorado, and it was followed by that section of the report of the Committee on Diseases treating on the same subject, by Dr. N. S. Mayo, of Kansas, who differed

considerably from the conclusions of Dr. Glover in regard to what constitutes a cure. He maintained that the subsidence of the symptoms of "itch" and the return of the denuded hair was no guarantee that the parasite was extinct; that it was very likely to begin its irritant operations again under proper environment (stabulation); that liberal feeding and the return of flesh was also not an assurance that the animal was no longer a host of the parasite. Most of the speakers who followed (Drs. Dunphy, Rutherford, Knowles, Norton, and Peters) confirmed Dr. Mayo's position, and contributed many other valuable points to the general discussion of mange.

"Needed Reforms in Veterinary Education in the United States" was from the pen of Dr. A. Liautard, of Paris, France, who has been intimately associated with education in this country since its birth, and has been regarded for many years as its founder and most enthusiastic champion. Although he has resided abroad since his retirement from active practice there is probably no man who keeps more thoroughly posted upon the conditions that exist here among the schools, his pen being in active operation at all times and nothing escapes his eye in the literature upon the subject. He reviewed the announcements of the various colleges and pointed out the weak parts contained in them, showing their wide divergence in entrance requirements, in the subjects taught and in the length of the courses. He advocated the rehabilitation of the Association of Faculties, in conjunction with the A. V. M. A., and their coöperation toward harmonizing and elevating the quality of the education imparted to students. He strongly urged a more stringent entrance examination, and thought there should be a uniform degree granted by the various colleges. The President, in his address, had spoken much in the same strain, and made some specific suggestions as to the accomplishment of the reforms urged; this document was referred to the Executive Committee to consider the suggestions contained in it, but that body was so overworked that it could not find time to take it up, deferring its consideration until the next annual meeting.

Prof. James Law was assigned by the programme to open the discussion upon Dr. Liautard's paper, and did so in a lengthy paper, dealing particularly with the high standard of the colleges of New York State, the high entrance requirements exacted by the State Board of Regents, and saying that it is impossible to unify the standard in all the States unless it be by their coming up to the New York standard. Other speakers followed

at length, taking a view different from that of Prof. Law, all admitting that they would not have the Empire State recede from its high position, but much could be done to make more uniform the other colleges of the country, and gradually lift them until such time as they may be brought up to the New York standard. Dr. S. Stewart, of Kansas City, dwelt at length upon this aspect of the subject, while Dr. James Robertson, of Chicago, made a plea for what he termed "the poor young man". He failed to make a distinction between poverty of purse and that of the mind, and seemed to think that being born on a farm was a greater qualification than a university education. Several speakers deplored his sentiment, and showed that the majority of the most brilliant scientific men had struggled with poverty, and had secured a classical education as well.

The subject was placed before the Association squarely in all its phases—first, by the President, then by the Committee on Intelligence and Education, then by Profs. Liautard and Law, and finally by the discussionists. The only action taken was the adoption of a resolution directing the President to appoint additional members of the Committee on Intelligence and Education to keep an espionage upon the colleges to ascertain how nearly they fulfil the statements made in their annual announcements.

"The Possible Eradication of Glanders by the Use of Mallein," by Dr. F. F. Brown, of Kansas City, proved a popular theme for discussion, those taking part in it being Drs. Winchester, Moore, Thomas, Rutherford, Abele, Law, and Young. Winchester asked for a definition of what was considered symptoms, and when should a horse be considered as exhibiting external manifestations of the disease. Rutherford detailed at length the system in vogue in Canada in dealing with the disease, and he showed plainly that he esteemed the serum less valuable as a curative agent than he did when discussing the same subject at Ottawa last year. He rather thought that a subject reacting should be destroyed, or at least should be placed under a very strict quarantine.

The guest of the Association, Dr. K. Tsuno, professor of veterinary sanitary science and police at the Imperial University of Tokio, Japan, not only attended every session of the convention as an attentive listener, but contributed a paper of much merit on "The Contagious Diseases of Animals in Japan," enumerating those most prevalent and detailing the manner of dealing with them.

It was greatly regretted that Dr. Leonard Pearson, of Pennsylvania, had not returned from Europe, for he was down for a paper upon the "Immunization of Cattle against Tuberculosis," but he sent his assistant, Dr. Gilliland, who read a statement of the progress of the important experiments now being conducted by them along this line, in which he declared that everything pointed to practical results of great moment to the profession. He announced that a full report would soon be promulgated by them detailing the progress thus far made. While this was received with satisfaction, the absence of the gifted State Veterinarian of Pennsylvania withheld from the Association much that he would have contributed to the subject.

Wednesday evening the hall was filled to its capacity to hear the papers requiring lantern slide views to illustrate them. These were "The Treatment of Roup in Fowls," by Dr. A. R. Ward, of California, and "The Clinical Examination of the Blood of Horses and Its Value to the Veterinarian," by Dr. V. A. Moore, of New York. They were well received, and in the case of the latter the speaker alluded to the great importance of blood examination in the diagnosis of disease. He said that during the coming year the subject would be pursued with a view of developing it to a point where any departure from the normal standard (shown in the present paper) would mean a definite thing.

"Veterinary Medicine and Surgery in the Philippines," by Dr. Charles H. Jewell, of Manila, P. I., was read by Dr. N. S. Mayo, and discussed by Drs. John H. Gould, Mayo, and Alex. Plummer, of the U. S. Army. Following this paper another one upon "Conditions of Practice Met With in the Philippines" was presented by Dr. Gould, of Fort Des Moines, Iowa, who has recently returned from the Far East. Dr. Hal C. Simpson, of Iowa, also made some interesting remarks about the conditions existing in that country.

"Quittors and Sidebones and Their Treatment," by Dr. C. C. Lyford, of Minnesota, was illustrated by numerous drawings and photographs illustrative of the subject. He detailed the various methods of operative interference, and also the method of treatment with the object of mummifying the diseased area. Dr. Berns, of New York, gave his experience with the Bahr method of operating, and was very enthusiastic at the results just obtained in a case in his practice operated upon by Dr. W. L. Williams while the latter gentleman was on a visit to Brooklyn. Dr. Merillat contributed considerable to the discussion,

throwing a little cold water upon the operation described by Dr. Berns as not being very practical save in the perfect operating room, but he failed to cool the ardor of the Brooklyn surgeon, who at once announced that he had on hand about fifteen cases of quittor, and he would submit every one of them to the operation described and report his results at the meeting of 1905. Drs. Law and Jensen described methods of treatment by injection, believing that frequently quicker results can be obtained without such radical measures.

"A Simple but Effective Live Stock Sanitary Law," by Dr. A. W. Bitting, Lafayette, Indiana, was read by the Secretary, and Dr. J. I. Gibson forwarded by Dr. Simpson a discussion of the new law, highly commending it, as it gave unusual power and discretion to the State veterinarian. Remarks were also made by Drs. Butler, Law, and Mayo.

Dr. G. E. Nesom, of South Carolina, fulfilled his number on the programme by addressing the meeting on the subject of "Some Observations on the Comparative Virulence of the Pyrosoma Bigeminum," detailing some experiments conducted by him. The subject was discussed by Drs. Law and Norton.

#### REVISION OF THE BY-LAWS.

The Executive Committee spent many hours in consideration of the report of the Committee on Revision of the Constitution and By-Laws, of which Dr. M. H. Reynolds was Chairman. This committee had taken great pains to produce an instrument which would eliminate some objections in the old document. It was read to the meeting and discussed whenever any objection was found. That section which required an applicant for membership to forward with his application the initiation fee and the first year's dues caused a long discussion, some thinking no dues should be charged for the first year. Put to a vote, the committee was sustained. Another bone for contention was the by-law requiring the President to appoint a nominating committee composed of past presidents. The Association rejected this proposition, and nominations will be made from the floor as in the past. In other respects the new Constitution and By-Laws were adopted.

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#### NOTES OF A. V. M. A. MEETING.

Never such a meeting.

More work was accomplished at the St. Louis meeting than at any of its predecessors.

More new members were admitted at St. Louis than at any previous meeting.

More executive business was transacted at St. Louis than at any previous meeting.

A novelty at the clinic was the administration of an aloetic ball to a horse by the wife of one of the members.

Dr. Leech's immaculate white costume was quite the sensation of the banquet.

New Jersey was represented by four of her best men—Lowe, of Paterson; Smith, of Jersey City; Runge, of Newark, and Horner, of Woodstown.

High as the mark was placed at Ottawa in the addition of new members, St. Louis eclipsed it—78 at Ottawa, 92 at St. Louis.

The Treasurer's report showed the Association to be more than \$200 richer than at the same time last year, notwithstanding some extraordinary demands upon its funds.

Invitations for the meeting of 1905 were received from Portland, Oregon; Cincinnati, Ohio; New Orleans, La.; Toledo, Ohio; and Detroit, Mich.

The members and professional visitors were glued to their chairs, taking in every word that fell from the essayists or the discussionists.

In this issue and subsequent ones, the REVIEW hopes to reproduce much that occurred at St. Louis; but this can never compensate for an absence from this meeting.

Dr. Alexander Plummer was the official representative of the Secretary of War at the meeting. Other army veterinarians present were Drs. John H. Gould, H. F. Steele, and W. L. Willyoung.

Dr. K. Tsuno, representative of the Japanese Government, presented the Association, through the President, with a copy of a statistical work entitled "Japan at the Beginning of the Twentieth Century."

Only one instrument house made a display at St. Louis—Sharp & Smith, of Chicago; and it did a good business in taking orders. Alex. Eger, the Chicago publisher of veterinary books, was on hand, as usual, and booked orders galore.

The Association contributed one hundred dollars to the Nocard Monument Fund, so that the amount subscribed by the Americans is now of a character somewhat in keeping with other nations.

At St. Louis, there were 175 members in attendance and 68

visiting veterinarians; at Ottawa there were only 103 members and 50 visiting veterinarians. There were two more ladies registered at Ottawa than at St. Louis.

Prof. E. Perroncito, of Turin, Italy, forwarded two pamphlets, written by him, to the Secretary, as a contribution to the programme. They were ordered translated and published in the "Proceedings."

Dr. Edward J. Creeley, Dean of the San Francisco Veterinary College, was an interested attendant at most of the sessions. He has grown very stout since his college days, but is active and unburdened by his *avoirdupois*.

They were there from almost everywhere: Dr. Shaw from Hawaii; Drs. Ward and Creeley from California; Drs. Rutherford and Thacker from Canada; Drs. Dalrymple and Phillips from Louisiana; Dr. Hill from Florida; Dr. Westcott from Maine; Dr. Norton from Arizona, and so on *ad infinitum*.

The South sent a large delegation—Dalrymple and Phillips from Louisiana; Hill from Florida; Cary from Alabama; Ranck from Mississippi; Nesom from South Carolina; Sheibler and White from Tennessee; Butler from North Carolina; Piatt from Kentucky, and quite a number of others.

The convention was photographed in front of the hall at noon on the second day, the picture containing about 240 individuals, although many had gone to luncheon or to the World's Fair, and of course no ladies were present, since the meeting place was a long distance from the hotel.

President Knowles announced his Executive Committee as follows: Charles E. Cotton, of Minnesota, Chairman; D. E. Salmon, Washington, D. C.; Roscoe R. Bell, New York; W. H. Dalrymple, Louisiana; W. Horace Hoskins, Pennsylvania, and John R. Mitchell, Indiana.

Dr. Richard P. Lyman, of Connecticut, has accepted the chairmanship of the Publication Committee for next year, and we congratulate the Association on its continued good fortune in securing the services of men of high type for this important position.

Dr. D. E. Salmon was greatly missed from the committee rooms and the debates, and we know how grievously he regretted not being able to attend. He was in the West with Secretary Wilson on important business connected with his department.

An Eastern party, consisting of Drs. James L. Robertson, George H. Berns, W. H. Dalrymple, Wm. Herbert Lowe, Thomas

E. Smith and Roscoe R. Bell, went by the Erie and Big Four, arriving in St. Louis six hours late, and on the return trip were eight hours behind the schedule. Moral: In going by rail to St. Louis take some other route.

The representative of the Japanese Government, Dr. K. Tsuno, was not a mere diplomatic functionary; he was in his seat throughout the meeting; nothing escaped him; he contributed to the programme in many ways, and when the meeting was concluded he gave assurance that he greatly appreciated the many courtesies extended him and had profited much by what he had heard and seen.

The badges came in for considerable criticism. They were "immense," their weight being sufficient to drag down the lapel of the coat. Of all such contrivances, that supplied at Ottawa was the neatest and most highly prized of any that we have ever seen. They were all preserved and many are yet being worn by ladies as collar pins and brooches, several being observed doing that service at St. Louis.

What is the matter with the Manhattan end of New York City? A solitary delegate from the largest veterinary population in this country. Dr. James L. Robertson (who rarely misses a meeting of the A. V. M. A.) was the only resident of Manhattan Island who thought it worth his while to attend the greatest meeting of scientific veterinarians ever held in this country.

By resolution of the Association, the Chairman of the Publication Committee will henceforth be exempt from dues, and his actual expenses while attending a meeting will be defrayed by the Association. This tardy recognition of very arduous labors was due to the thoughtfulness of the retiring chairman, Dr. M. H. Reynolds, who, though he received nothing himself for several years of excellent and earnest work, was unwilling that his successor should be without some recompense.

The exhibit of the Bureau of Animal Industry in the Government Building at the World's Fair is very complete and fascinatingly interesting and instructive. Dr. Wm. J. Fink has charge of it, and took delight in showing the visiting veterinarians everything calculated to engage their attention. He has very kindly volunteered to assist Dr. D. Arthur Hughes in preparing his report of the exhibit for the REVIEW, by furnishing him his notes.

Dr. L. A. Merillat, at the conclusion of his paper, "When to Operate," spoke in a disparaging manner of the character of

the clinics held under the auspices of the A. V. M. A., and thought they should be placed in charge of a committee of competent surgeons in the future, or else be abandoned. These clinics, he said, should be conducted under the strictest rules of modern antiseptic surgery, with all necessary appliances, and the whole to be worthy of the representative veterinary organization of America. In this opinion the REVIEW heartily concurs; but it can see no reason why they should be abandoned. As the President has, or is to appoint a Committee on Programme, it is presumed that they will correct the errors complained of.

Dr. Booker, of Alton, Ill., exhibited a spiral steel spring, about eight inches long, an inch and a half in diameter, and weighing about two pounds, which he had removed from the small intestine of a horse. The explanation of its presence given by the surgeon is as follows: The spring had been used on a farming implement, but was too strong. Consequently it was replaced by one more suitable, and the old one was hung against the wall. The horse, reaching up to the ceiling or haymow to seize some hay in its mouth, dislodged the spring, which fell into its open pharynx; its weight prevented its being brought back into the mouth by the tongue, and the contractions of the pharyngeal muscles, together with the weight of the foreign body, forced the object into the cesophagus and thence into the stomach, finally passing into the intestinal tract, where it induced fatal colics.

The Committee on Revision of the Constitution and By-Laws made a recommendation which failed to be ratified by the Association, which evidently failed to grasp the spirit which actuated its promoters. The proposition was to have a Nominating Committee appointed to consist of all the past presidents who may be in attendance upon a meeting. This committee was directed to present the names of not less than three candidates for the office of President; ten for the five vice-presidential positions; and two each for Secretary and Treasurer. There was nothing in the by-law to prevent other names from being placed in nomination; it merely insured a contest for the offices, instead of the method of naming one candidate, and closing off nominations before an opportunity was given to everyone to avail themselves of the privilege. But several members thought it would partake of the character of machine politics, restrict their liberty, etc., and so it was voted down.

The banquet at the Monticello was a great success. One hundred and sixty or more sat around the long tables, among whom were a large number of ladies. Dr. Roscoe R. Bell acted as toastmaster, and on either side of him at the head of the table were Dr. Laidley, Medical Director of the World's Fair; Dr. Ray, of the University; Dr. Tsuno, representing the Government of Japan; Dr. Knowles, the President-elect; Dr. Rutherford, Veterinary Director-General of Canada; Secretary Repp; Dr. Winchester, former President of the A. V. M. A.; and Dr. Williams, also a former President. At the conclusion of the repast the toastmaster introduced Dr. Ray, who spoke to the sentiment of "The Two Branches of the Medical Profession;" Dr. Laidley, "The Veterinarian and the World's Fair;" Dr. Higgins, "Our Canadian Brethren;" Dr. Williams, "The Veterinarian as a Teacher;" Dr. Hoskins, "The Veterinarian as a Politician;" Dr. Butler, "The Veterinarian as a Citizen;" Dr. Mayo, "The Ladies;" Dr. Knowles, "The A. V. M. A.;" Dr. Tsuno, "A Message from Japan." During the evening Dr. Annand delighted the audience by some well-rendered songs. The singing of "Auld Lang Syne" by the banquetters brought the enjoyable evening to a close.

#### MINNESOTA STATE VETERINARY MEDICAL ASSOCIATION.

The seventh semi-annual meeting was called to order at Litchfield, Minn., at 2.30 P. M., July 14, by Dr. L. Hay, President and Chairman. After roll-call the minutes of last meeting were read and accepted as read.

The Treasurer's report was next given, which showed a balance of \$80.71 in the hands of the Treasurer, with no indebtedness. From a financial standpoint our Association was never in such a flourishing condition.

Under the head of new business came the distribution of the directory of licensed veterinary practitioners, which the Association instructed the Secretary to have printed at our January meeting. Dr. Annand thought that a dollar per copy to individuals who are not members of our Association was too high. Dr. Ward made a motion, which was seconded by Dr. B. Lambrechts, that the price of the directories be reduced to twenty-five cents per copy, and that a new directory be printed every two years.

The Secretary was instructed to notify all licensed practi-

tioners in the State that the directory can be obtained at the office of the Secretary for twenty-five cents per copy. It was moved and seconded that a copy of the directory be sent to all the reputable veterinary colleges. Carried.

What will be done with delinquents? was a question asked by the Secretary. After reading the list of members who are in arrears, Dr. Reynolds made a motion, seconded by Dr. Lees, that all members who are in arrears three years at our next meeting be dropped from our membership list, and that the Secretary send two written notices to the delinquents stating the action the Association had taken with delinquent members before our next meeting. Carried.

It was moved and seconded that the Secretary be exempt from all dues. Carried.

After the general order of business came the report on colleges. Dr. Reynolds, chairman of the committee, gave the following information:—

The Wattles Veterinary College and the Kansas City University Veterinary College, of Kansas City; Indiana Veterinary College, and the Veterinary College at Grand Rapids, Michigan, are not of very high standing, and graduates of these colleges should not be invited to the membership of our Association. Graduates from the following veterinary colleges ought to be invited to membership in our Association: Kansas City Veterinary College, Iowa State College, Chicago Veterinary College, McKillip Veterinary College, Ontario Veterinary College, Ohio State University, University of Pennsylvania, Cornell College, New York-American Veterinary College and any other reputable college.

Dr. Ward, also a member of the Committee on Colleges, gave the following report: All graduates who pass the Minnesota State Veterinary Examining Board should be invited to become members of our Association. Rejected. Dr. Reynolds' report was adopted.

It was moved and seconded that Dr. Ward, for submitting such a report, should present the Association with a box of cigars. Carried.

In a very short space of time all members, except Dr. Lyford, who despises the Havana as he does the quack, were enjoying the hospitality of Dr. Ward.

Committees on Bacteriology and Infectious Diseases had no reports to offer.

Dr. J. P. Foster, Chairman, Committee on Surgery, was not

present, but instead of sending a report on surgery, sent a report of one of his surgical cases, which was read by the Secretary, and it is published in this number of the REVIEW in the department of "Reports of Cases."

Dr. Lyford gave a report for the Committee on Empirics and Legislation. From his experience in the last few months, Dr. Lyford has arrived at a few conclusions: that convictions against illegal practitioners are hard to get, also that some changes should be made in our practice act at the next meeting of our Legislature.

Meeting adjourned until 8 p. m.

The evening session was devoted to papers and discussions. Dr. M. S. Whitcomb's paper on "Obstetrics"\*\* opened up a great field for discussion, especially for the country members. Dr. Lyford's paper on "Hernia"\*\* was the start to a very heated discussion. Dr. Price's unfinished paper on "Azoturia"\*\* was truly an ably prepared document. In the near future, Dr. Price hopes to complete some experiments, which will enable him to finish his paper so the profession can have the benefit of his untiring energy.

The hour being late the meeting adjourned.

At 9 A. M., July 15, the members of the Association were invited to a very interesting clinic held at Dr. Peter's infirmary. Clinic number one was a sorrel filly, two years old, very much emaciated. It had been ailing about four weeks, but never lost a meal. She came from a farm where fifteen horses had died in the last three years. The owner permitted us to destroy the animal for post-mortem. The post-mortem revealed swamp fever. Clinic number two was a bay mare, eight years old, lame in right fore limb. Dr. Hay had a suspicion it was due to navicular arthritis. A hypodermic of cocaine nearly obliterated all trace of lameness. Clinic number three was a bay colt, three years old. It was lame in the left hind limb. Diagnosis, spavin. Clinic number four was a bay mare, eleven years old. It was lame in the left hind limb. It took lame in March. There was such a diversified opinion that no conclusion was reached. Clinic number five was a gray horse, four years old, with an enlargement about 6 x 10 inches in the left hypochondriac region. It was quite sensitive to the touch. It had been there about four months. Dr. Lees and Dr. Hay diagnosed a cartilaginous growth from injury to the cartilage of prolongation. Dr. T.

\* Will be published in an early number of the REVIEW.

Lambrechts diagnosed a deep-seated abscess. Drs. Hay and Lees operated and confirmed Dr. T. Lambrechts' diagnosis.

The arrival of the dinner hour brought the convention to a close.

It afforded our members a great pleasure to have Dr. Holcomb, of the Bureau of Animal Industry, Washington, D. C., with us at our meeting.

J. G. ANNAND, *Secretary.*

#### NEW YORK STATE VETERINARY MEDICAL SOCIETY.

The fifteenth annual meeting will be held in Brooklyn, Tuesday, Wednesday and Thursday, Sept. 13, 14, and 15. Headquarters have been established at the Clarendon Hotel, Johnson, Fulton and Washington Streets, and the regular sessions will be held at the Assembly, 308 Fulton Street (close to the Hotel). The local Committee of Arrangements, consisting of Drs. W. F. Doyle (Chairman), Elisha Hanshew, C. E. Clayton, Robert W. Ellis, and Robert W. McCully, have perfected their plans so as to insure a splendid meeting from all points of view.

The programme as at present arranged is as follows :

##### PAPERS AND DISCUSSIONS.

"Rapid Method of Diagnosing Rabies," by V. A. Moore and Cassius Way, Ithaca, N. Y.

"Glanders," by H. D. Gill, New York City.

"Osteo-porosis," by Werner Runge, Newark, N. J. (Subject not yet announced), by James Law, Ithaca.

"Molasses as a Food," by Pierre A. Fish, Ithaca.

"Intussusception in a Five-Months-Old Colt," by Clarence E. Shaw, Brooklyn.

"Treatment of Black-Leg," by A. K. Kellam, Ellicottville.

"Resection of Flexor Pedis Tendon for Infected Wounds of the Navicular Bursa," by W. L. Williams, Ithaca.

"Clinical Study of Anthrax in Cattle," by S. H. Burnett, Ithaca.

"The Physiology of the Rubber Horse-Shoe Pad," by Roscoe R. Bell, Brooklyn.

"Etiology and Morbid Anatomy of Diphtheria in Chickens," by W. B. Mack, Ithaca.

"Remarks on and Specimens of Maladie du Coit," by V. A. Moore, Ithaca, and W. H. Kelly, Albany.

(Title not announced), by R. A. McAuslin, Brooklyn.

## SURGICAL AND MEDICAL CLINICS.

Quittor (Baer Method), W. L. Williams.  
 Quittor (Freck Method), W. F. Doyle.  
 Cryptorchid Castration, R. E. Waters.  
 Resection of the Flexor Pedis Perforans for Infected Navicular Bursa, W. L. Williams.  
 Plantar Neurectomy, R. W. McCully.  
 Median Neurectomy, C. E. Clayton.  
 Naso-Esophageal Intubation, J. B. Hopper.  
 Peroneal Tenotomy for the Cure of Stringhalt, C. E. Shaw.  
 Oophorectomy in Mare for the Relief of Nymphomania, J. E. Ryder.

A number of other operations, which cannot now be assigned, will be performed by the following surgeons: R. C. Reed, G. T. Stone, E. B. Ackerman, E. Hanshew, F. F. Fehr, H. D. Gill, R. W. Ellis, J. L. Wilder, A. H. Ide, and others.

Surgical clinics for major operations will be conducted at Dr. Berns' infirmary, 74 Adams Street, at 8 p. m. Tuesday; 8 p. m. on Wednesday, and for general operations on Thursday from 9 A. M. to 1 P. M.

Medical clinic at Dr. E. Hanshew's Infirmary, 125 Carlton Avenue, Wednesday, 8 A. M.

Reception and luncheon at 2 p. m., Thursday, at Schmitt's Hotel, Liberty, Fulton and High Streets, after which a trolley ride will be taken to Coney Island, where special arrangements have been made for the entertainment of the members of the Society and their friends. Special arrangements have been made to entertain the attending ladies.

Veterinarians from neighboring States are cordially invited to be present.

Wm. HENRY KELLY, *Secretary.*

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CONNECTICUT VETERINARY MEDICAL ASSOCIATION.

The semi-annual meeting was held at Waterbury, Tuesday, Aug. 2, 1903. The clinic was held from 11 A. M. to 3.30 P. M., at Dr. Thos. Bland's hospital. Many interesting cases were exhibited. Several operations, both major and minor, were performed. Prof. W. L. Williams, of New York State Veterinary College, assisted in several of the operations and demonstrated his method of operating, which was interesting and instructive to the veterinarians present. While the clinic was in progress

the Committee on Legislation met in Dr. Bland's office to discuss the framing of a bill to present to the Legislature. Dr. Wm. Herbert Lowe, of New Jersey, was present and kindly consented to help the committee, giving it much advice and many helpful suggestions, which he said he had learned from experience in getting the present law in his own State.

At 3.30 the veterinarians repaired to Hotel Connecticut, where an excellent dinner was enjoyed.

After dinner the meeting was held in the Business Men's Association rooms. President Dr. Bates called the meeting to order at 4.30 P. M. The following members responded to roll-call: Drs. E. C. Ross, Geo. H. Parkinson, Thomas Bland, M. Isaac, H. Whitney, H. E. Bates, J. H. Gardner, R. D. Martin, J. E. Underhill, L. B. Judson, G. T. Crowley, C. R. Witte, P. T. Keeley, F. A. Ingram, G. F. McGuire, J. F. Laden, F. F. Bushnell, G. W. Loveland, J. H. Kelley, R. P. Lyman, R. S. Todd, B. K. Dow. Visitors: Drs. G. E. Corwin, Lakeville; H. C. Balzer, Meriden; G. T. Elliott, Bristol; W. L. Fowler, Greenwich; J. S. Schofield, Greenwich; T. Thackaberry, New York City; T. F. Krey, New York City, and Dr. B. D. Pierce, Springfield, Mass.; Dr. T. E. Robinson, Westerly, R. I., Secretary of the Rhode Island Veterinary Medical Association; Dr. William Herbert Lowe, Paterson, N. J., President New Jersey State Veterinary Medical Association, also President State Board of Veterinary Medical Examiners, and Prof. W. L. Williams, of the New York State Veterinary College.

Minutes of the previous meeting were read and approved. Reports of the Secretary and the Treasurer were read and accepted.

The Board of Censors reported favorably on the applications of Drs. G. E. Corwin, Jr., H. C. Balzer, G. T. Elliott and C. L. Adams.

It was voted to instruct the Secretary to cast one vote for the applicants. The Secretary then cast one vote, electing the above named veterinarians to membership in the Association.

The Secretary read the following applications for membership: W. L. Fowler, V. S., Greenwich, Conn., graduate New York College of Veterinary Surgeons, '98, vouchers Drs. J. S. Schofield and R. D. Martin; J. S. Schofield, V. S., Greenwich, Conn., graduate Ontario Veterinary College, '90, vouchers Drs. Thos. Bland and B. K. Dow.

The applications were referred to the Board of Censors for their action.

The Chairman of the Committee on Legislation reported that the committee had drafted a bill, which he read. The Chairman said the committee did not consider the bill as perfect or complete in all its details, but that it would serve as a framework for a bill, such as the members might approve of. Several clauses of the purposed law were freely discussed by the members, but no action was taken, the matter being left with the committee.

Dr. Wm. Herbert Lowe addressed the meeting, giving many useful and valuable hints in regard to the proposed law for veterinary registration in Connecticut. He wished the members success in their efforts in getting their bill through the Legislature, and said they should not stop work as soon as a law to register veterinarians was enacted, but should continue to labor for still better lawful recognition. He earnestly urged the members to work hard to educate the people as to what the veterinarian's proper sphere was among them, not simply a "horse doctor," but "scientists" in the true sense of all that that pertains to regarding the veterinary profession. He also asked the members, as individuals, to work for higher and broader education along the lines of sanitary science as well as theoretical and practical veterinary medicine.

Prof. W. L. Williams made a short address explaining the educational qualifications required of veterinarians in the State of New York before they could receive a license to practice. He admonished the doctors present to always deal honorably by their clients, never to practice any of the principles of quackery, and try to teach our patrons that we were working for their interests as well as our own. This would go a long way in a short time, he said, in convincing the public that the veterinary profession is composed of educated men which they can employ and trust.

Dr. B. D. Pierce made a few remarks along the line of attending veterinary association meetings. He explained the importance of attending such meetings, the benefit one always gets, and the encouragement he can give by being present.

A vote of thanks was tendered Prof. Williams for his demonstrations at the clinic, to Dr. Lowe for his advice and assistance given the Committee on Legislation; also to Dr. Bland for arranging the excellent clinic and the hospitality extended the members at this meeting.

Dr. Bland spoke of the lack of time for the work of the meeting, also that for the past two years more work had to be

done than time would permit; he thought more time must be provided for the meetings in the future, and made a motion that a day and an evening be devoted to future meetings and more time given to discussion of business and papers. Seconded and carried.

Visiting veterinarians thanked the members for their courtesy and entertainment, and invited them to attend the coming meetings of their respective associations. Members of the American Veterinary Medical Association urged all who could to attend the annual meeting of that organization at St. Louis.

Dr. R. P. Lyman, in behalf of Dr. Colton and himself, invited the Association to hold its annual meeting at their hospital in Hartford. The meeting will be held the first Tuesday in February, 1905.

The Committee on Legislation will hold a committee meeting in Hartford in the fall, notice of which will be given later.

A detailed report of the clinic and records of the various operations performed will be given the REVIEW for publication later.

B. K. Dow, *Secretary.*

#### VETERINARY MEDICAL ASSOCIATION OF NEW JERSEY.

The semi-annual meeting was held at Stetter's Assembly Hall, 842 Broad St., Newark, on July 14th, 1904. In point of attendance and spirited discussion this meeting must rank as one of the best midsummer meetings ever held by the Association. During the session 65 were in attendance and 50 members of the profession were entertained at the I. P. M. banquet.

The meeting convened at 10 A. M., and 45 members responded to roll-call. The reports of standing committees were made by the several chairman.

Drs. H. H. Butler, of Westfield; B. K. Baldwin, Newark; W. H. Lowe, Jr., Paterson; A. G. Hopper, Ridgewood; Samuel Christy, Elmer, and Chas. H. Perry, of Lakewood, were elected to membership.

The Treasurer reported a balance of \$91.86 in the treasury.

Dr. Budd spoke of the advantages accruing to the profession from the increasing popularity of horse shows. Drs. Budd, Vander Roest and English were appointed a committee to represent the Association at the various horse shows of the State.

Dr. Vander Roest read a paper on the use of "Tallianine"

in veterinary practice, and Dr. Pope presented the subject of anaesthesia in veterinary practice. Both subjects were discussed at length.

While some expressed themselves as pleased with the action of "Tallianine," the majority reported disappointing results.

The consensus of opinion pointed to the more extensive and scientific use of anaesthetics in veterinary practice.

After the dinner at 1 P. M. the meeting was reconvened for the transaction of unfinished business and at 3 P. M. was adjourned to Dr. Henry Vander Roest's hospital, where an interesting clinic had been arranged by a special committee, headed by Dr. James T. Glennon. Some features of the clinic were the siphoning of the stomach of the horse, neurectomy and cautery operations.

It was voted that the annual meeting in January, 1905, be held in Newark.

GEORGE W. POPE, *Secretary.*

ANSWERS TO CORRESPONDENTS.—*J. J. H., Wisconsin*: The article you refer to would require too much space, and it is not sufficiently popular; while a few may be interested in it, veterinary readers as a whole would care little for long dissertations on diseases of wild animals. . . . *F. P. J., New York*: The State Board of Veterinary Medical Examiners is composed of five members—G. H. Berns, Brooklyn, President; C. D. Morris, Binghamton, Secretary; Charles Cowie, Ogdensburg; W. L. Baker, Buffalo, and E. B. Ackerman, Brooklyn. . . . *M. M. P., New York*: The REVIEW will publish your paper as early as possible.

TO DRIVE AWAY FLIES.—The Kansas Agricultural College authorities have tried the following preparation upon their dairy herd, recommended by F. A. Marlatt: Fish oil, two quarts; crude carbolic oil, one pint; oil of pennyroyal, one ounce; oil of tar, ten ounces; kerosene, one quart. This preparation may be applied with a brush, cloth or atomizer, and will cause the flies to leave immediately. All of the ingredients, except kerosene, can be procured at the drug store, and will cost in the neighborhood of eighty-five cents per gallon. With the College herd of thirteen calves, they find that one gallon of this mixture will make from forty to forty-five applications, and a single application will keep the flies off from two to three days. This will make the cost about two cents per application, or about one-half to one cent per day per head.

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## NEWS AND ITEMS.

*REVIEW* readers are urgently requested to send in for publication personal items of news concerning themselves or their professional friends; legislation; extraordinary circumstances encountered in practice; or any news that is calculated to interest their fellow-readers. It is confidently believed that by a greater concert of action in this direction all will be benefited, and that this publication will thus be rendered a better medium of communication between its large family of professional readers. Its circulation is now much greater than was ever accorded to a veterinary publication in America, and it is the desire of the publishers to make it more acceptable with each issue.

DR. SAMUEL ATCHISON, of Brooklyn, N. Y., was married to Miss Sarah McCurdy, of the same city, on Aug. 17.

DR. A. LIAUTARD, of Paris, France, has been summering at Aux-les-Bains.

DR. LEONARD PEARSON is understood to be studying tuberculosis in Italy during his Summer vacation.

DR. E. M. RANCK, of Natchez, Miss., reports practice as good, and says that properly educated and practical veterinarians will find a good field in the South.

G. HOWARD DAVISON, D. V. S., of Millbrook, N. Y., has been prominently mentioned for the vacant position of Assistant Secretary of Agriculture for the United States.

DR. TSUNO, who represented the Japanese Government at the St. Louis meeting of the A. V. M. A., narrated the fact that the National Veterinary Association of his country has a membership of over one thousand.

DR. J. G. RUTHERFORD, Veterinary Director-General of Canada, has ordered destroyed, about two hundred horses affected with maladie du coit, which his officers have quarantined in the North West.

DR. M. H. REYNOLDS, of Minnesota, reports that the new Live Stock Sanitary Board is doing excellent work, the appropriation is yearly becoming larger, and the executive affairs of the Board are in the hands of veterinarians.

DRS. W. L. WILLIAMS, of New York; Wm. Herbert Lowe, of New Jersey, and Benj. D. Pierce, of Massachusetts, attended the annual meeting of the Connecticut Veterinary Medical Association, at Watertown, Aug. 2.

A VETERINARY SURGEON NEEDED.—The amateur automobile tries to go through a ten-mile-ordinance town at the

rate of forty miles an hour. At the intersection of the main streets he whirls into a collection of cables, chains, fence-posts, and other barriers. He is dug out of the wreck and carried into the first doctor's office his rescuers see. "I can't do anything for this man," says the doctor. "I'm a veterinary surgeon." "You're the right man, doc.," moans the amateur automobilist. "I was a jackass to think I could run that machine."

**THE POWER TO PROSECUTE IN NEW JERSEY.**—The New Jersey State Board of Veterinary Medical Examiners has issued the following circular letter to members of the profession in that State in reference to the prosecution of violators of the laws governing the practice of veterinary medicine: "Dear Doctor:—A large number of the veterinary practitioners of this State believe that the enforcement of the penalties of 'An Act to regulate the practice of veterinary medicine, surgery and dentistry in the State of New Jersey, to license veterinarians and to punish persons violating the provisions thereof,' approved March 17, 1902 (Chapter 18, Laws 1902) devolves upon the State Board of Veterinary Medical Examiners. It seems proper to state at this time that such is not the case. *The enforcement of this law belongs to the court officials in the respective counties in which the violations take place*, notwithstanding the fact that the statute makes it lawful for the State Board of Veterinary Medical Examiners to institute *civil* proceedings in any court of competent jurisdiction against any person, company or association for the violation of any of the provisions of the act. *The Veterinary Act makes it the duty of district attorneys to prosecute violators of said act.* The State Board of Veterinary Medical Examiners is desirous of acting in conjunction with the respective district attorneys of the counties of this State in enforcing the law in all cases where sufficient evidence can be procured to bring about a conviction. The law is ample to secure the conviction of offenders, but in order to do this your coöperation is earnestly requested. It will be very much appreciated if you will furnish the Board with the necessary data in any case of infraction of the law that may occur within your cognizance. It should not be forgotten that the evidence must be of such a character as will give reasonable assurance of furnishing a true bill from the Grand Jury, and we would suggest that affidavits be obtained from at least two witnesses in each case in order to avoid the common annoyance of bringing suit on oral evidence, *such evidence being afterwards denied or modified before the Grand Jury.*"

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## VETERINARY MEDICAL ASSOCIATION MEETINGS.

In the accompanying table will be found the dates, places of meeting, and Secretaries' names and addresses of all the Veterinary Medical Associations of the United States and Canada, so far as obtainable by the REVIEW. Secretaries are urgently requested to see that the organizations which they represent are properly included in the list.

Name of Organization.	Date of Next Meeting.	Place of Meeting	Name and Address Secretary.
American V. M. Ass'n.....	.....	.....	J. J. Repp, 5249 Addison St., Phila., Pa.
Vet. Med. Ass'n of N. J.....	Jan. 14, 1905.	Newark.	G. W. Pope, Athenia, N. J.
Connecticut V. M. Ass'n.....	1st Tu. Feb. '05.	Hartford.	B. K. Dow, Willimantic.
New York S. V. M. Soc'y.....	Sept. 13-15, 1904	Brooklyn.	W. H. Kelly, Albany, N. Y.
Schuylkill Valley V. M. A.....	Reading.	Dec. 21, 1904.	W. G. Huyett, Wernerville, Pa.
Passaic Co V. M. Ass'n.....	Oct. 4, 1904.	Paterson, N. J.	H. K. Berry, Paterson, N. J.
Texas V. M. Ass'n.....	.....	.....	H. D. Paxson, Ft. Worth.
Massachusetts Vet. Ass'n.....	Monthly.	Boston.	F. J. Babbitt, Lynn, Mass.
Maine Vet. Med. Ass'n.....	.....	.....	C. L. Blakely, Augusta.
Central Canada V. Ass'n.....	.....	Ottawa.	A. E. James, Ottawa.
Michigan State V. M. Ass'n.....	.....	.....	Judson Black, Richmond.
Alumni Ass'n N. Y.-A. V. C.....	April, 1905.	141 W. 54th St.	W. C. Miller, N. Y. City.
Illinois State V. M. Ass'n.....	December.	Chicago.	W. H. Welch, Lexington, Ill.
Wisconsin Soc. Vet. Grad.....	Call of Pres't.	Racine.	S. Beattie, Madison.
Illinois V. M. and Surg. A.....	.....	.....	W. A. Swain, Mt. Pulaski, Ill.
Vet. Ass'n of Manitoba.....	.....	.....	F. Torrance, Winnipeg.
North Carolina V. M. Ass'n.....	.....	.....	T. B. Carroll, Wilmington.
Ontario Vet. Ass'n.....	December, 1904	Toronto.	C. H. Sweetapple, Toronto.
V. M. Ass'n New York Co.....	1st Wednesday of each month.	141 W. 54th St.	D. J. Mangan, N. Y. City.
Ohio State V. M. Ass'n.....	Jan. 17-18, 1905	Columbus.	W. H. Gribble, Washington C. H.
Western Penn. V. M. Ass'n.....	1st Wednesday of each month.	Pittsburgh.	F. Weitzell, Allegheny.
Missouri Vet. Med. Ass'n.....	.....	.....	Stanley Smith, Columbia.
Genesee Valley V. M. Ass'n.....	.....	.....	J. H. Taylor, Henrietta, N. Y.
Iowa State V. M. Ass'n.....	.....	.....	H. C. Simpson, Denison, Ia.
Minnesota State V. M. Ass'n.....	.....	.....	J. G. Annand, Minneapolis.
Pennsylvania State V. M. A.....	.....	.....	C. J. Marshall, 2004 Pine St., Phila.
Keystone V. M. Ass'n.....	2d Tuesday of each month.	Philadelphia.	C. J. Marshall, 2004 Pine St., Phila.
Colorado State V. M. Ass'n.....	1st Mon. in June	Denver.	M. J. Woodliffe, Denver.
Missouri Valley V. Ass'n.....	.....	.....	B. F. Kaupp, 3712 Michigan Ave., Kansas City.
Rhode Island V. M. Ass'n.....	.....	.....	T. E. Robinson, Westerly, R. I.
North Dakota V. M. Ass'n.....	2d Tues. Jan.	Fargo.	E. J. Davidson, Grand Forks.
California State V. M. Ass'n.....	Mch. Je. Sep, Dc	San Francisco	P. H. Browning, San Jose.
Southern Auxiliary of California State V. M. Ass'n.....	Jan. Apl. Jy, Oct.	Los Angeles.	H. D. Fenimore, Los Angeles.
South Dakota V. M. A.....	.....	.....	E. L. Moore, Brookings.
Nebraska V. M. Ass'n.....	.....	.....	A. T. Peters, Lincoln.
Kansas State V. M. Ass'n.....	January, 1905.	Topeka.	Hugh S. Maxwell, Salina.
Alumni Association A. V. Col.....	April each yr.	New York.	F. R. Hanson, N. Y. City.

## PUBLISHERS' DEPARTMENT.

Subscription price, \$3 per annum, invariably in advance; foreign countries, \$3.60; students while attending college, \$2; single copies, 25 cents.

Rejected manuscripts will not be returned unless postage is forwarded.

Subscribers are earnestly requested to notify the Business Manager immediately upon changing their address.

THE publishers have from time to time, through this department, called the readers' attention to the importance of a careful perusal of the advertising pages of the REVIEW, which are interesting and instructive to veterinary practitioners by placing before them new instruments and apparatus, new preparations, etc., designed for their convenience and assistance in the hurry of everyday practice. Something of especial interest, and entirely new, so far as its appearance in the REVIEW advertising pages is concerned, although already known to many veterinary practitioners, is to be found on page 4 of this issue (adv. dept.).

THE LENNOX CHEMICAL CO. have lent their efforts to the needs of veterinarians in the treatment of Parturient Paresis in cattle, until they now have an apparatus well nigh perfect, and invite correspondence from practitioners, to whom they will be pleased to furnish any information desired.

DR. PHILLIPS' PERFECTED STOMACH TUBE has found favor among veterinarians who have become acquainted with it, and it seems to be making friends rapidly.

THE FIRST TWO ADVERTISEMENTS AT THE FOOT OF THIS PAGE are so attractive from what they have to offer, that we will have to call attention to the one immediately beneath them, which we fear might otherwise be overlooked; and we are anxious to obtain these numbers to complete the volumes of some of your fellow readers who desire to bind them. One gentleman away down in South Australia is patiently awaiting the arrival of a January, 1904, number, so that if any of our subscribers have duplicates of that number, or one to spare for any reason, send it along.

### PRACTICE TO LEASE WITH THE PRIVILEGE OF BUYING.

TO LEASE, with the privilege of buying, a good practice, including house, barn and infirmary, in a temperance city of 5000. Address M. W. STARK, 319 E. Main Street, Hoopestown, Ill.

### PRACTICE FOR SALE.

FOR SALE, a good country practice, established twenty years; seventeen miles from New York City. Price, \$300. For full particulars address, B. C. G., care of AMERICAN VETERINARY REVIEW, 509 W. 152d St., New York.

### JANUARY 1904 REVIEWS WANTED.

WANTED, a few copies of the January, 1904, issue of the REVIEW, for which the publishers will pay 25 cents apiece. Address, ROBT. W. ELLIS, Business Manager, 509 W. 152d St., New York.

### ASSISTANT WANTED.

WANTED.—Veterinary assistant, graduate preferred, for city practice. Opportunity for advancement. Address PERMANENT, care of AMERICAN VETERINARY REVIEW, 509 W. 152d St., New York.